

Folio

16

Residence

IN ACCOUNT WITH

**DR. GUTHRIE,**

**GROCER**

10th Street and 9th Avenue,

NEW YORK.

F. J. McCLUSKEY, Mfr and Printer, 262 Greenwich St., N. Y.

1 straight 6. guinea hds 4. white  
wts in before last stage, but dwelle  
l staying, and of last & 8. structure

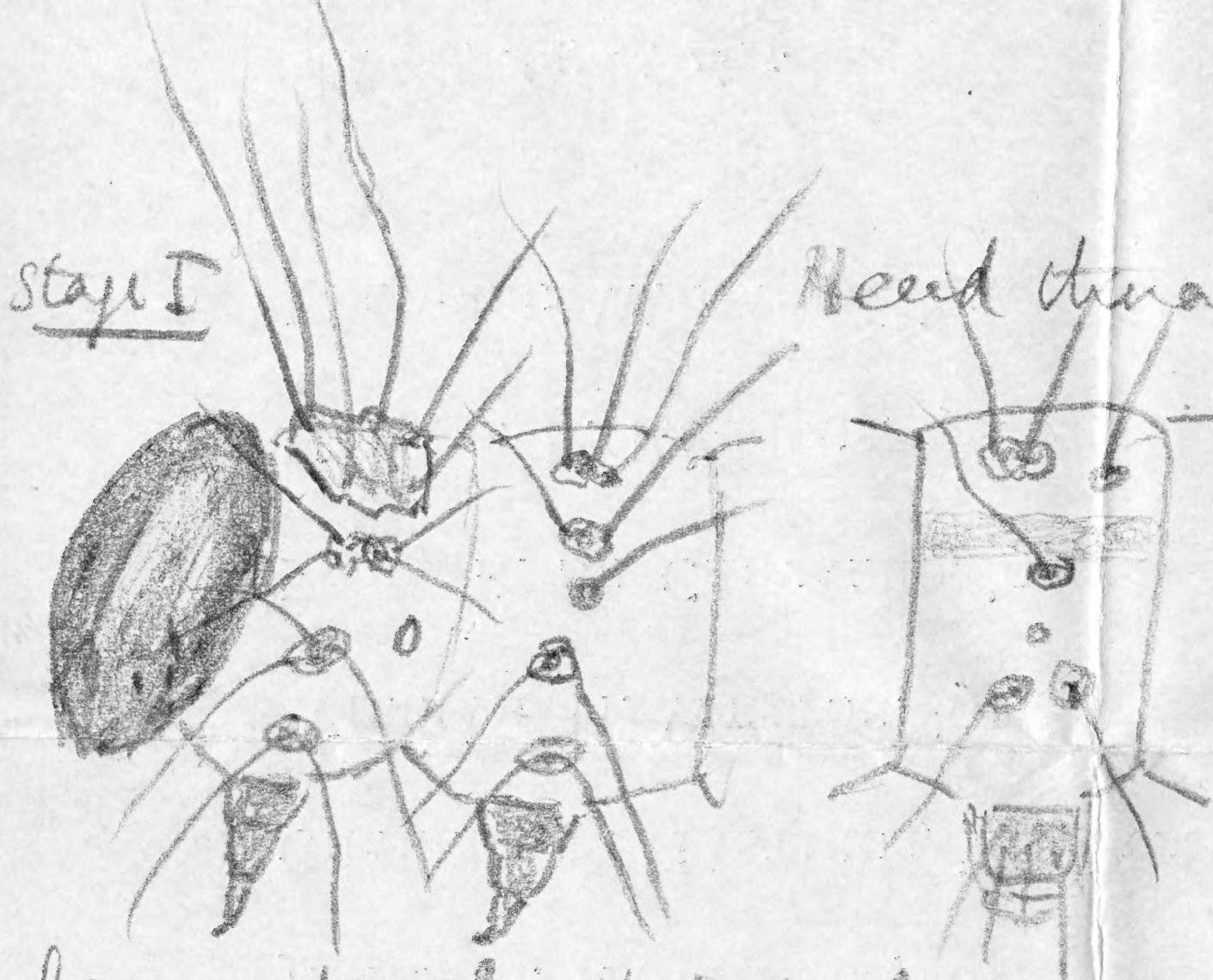
# Chris Dyer

in acc with  
C Steffens

4	Pearline	30
9	C Oil	20
	C Starch	10
	q/l Milk	8
	yeas	2
2	W.C. Meal	8
B	Powder	25
	Cappelli	10
	Claret	35
	Catfish	15
1/2	Cheese	0 1.5 - 2.0
	Celery	1/2
	Im Potat	15
6	Soda	10
	BBT Vanilla	Average 2.63 95

578	All the sh. hds.	2.9	(2.7)	2.6	2.7								235
		3.0	(2.2)	2.9	2.7	2.6	2.5	2.45	2.4				
		2.55	2.65	2.2	2.98	2.6	2.8	3.2	2.35	2.7	2.9	2.4	
		2.1	2.3	2.6	2.95	3.0	3.2	2.5	2.6	2.4	2.8	2.2	2.15

<sup>=390?</sup>  
Datomas on yellow birch Jefferson Highlands N.H. Aug 10 1895  
Egg Round, white with bright red and central  
black spot.



Head thorax feet leg plates, etc  
anal pl. & feet and  
tubercles black. Body  
pale yellow, a lateral  
brown band and brown  
spotting d. 3, 4 and 12  
the latter often faint  
In above, trace of a dorsal  
line centrally. Hairs pale, no  $\delta$ ; anal feet long, hairy.  
Some brown areas along bases of feet, slight. Hd., .45  
Later besides the distinct brown d. a lot hair fainter  
8d and 8tf; widening into spots in 3, 4 and 12; a brown  
line next mid-center.

Molt stage 18 Brown with lines as broad or broader than spaces  
greenish yellow. Hd. legs. Cth & anal plate black. Medi-  
anterior line distinct but pedal only just indicated. Hairs  
numerous all whitish 10 rather longer than  $2^2$  (about  $\frac{1}{2}$  more)  
all pointed spirulose, the little tubercles black. (Like 390 II)  
Look like minista Aug 24.

LAST ADDRESS.

AECHIRAU HONGMA, '74, Railway Office, Nagano, Nagano-Ken, Japan.

JOSHUA B. F. BREED, '76, 1348 Second St., Louisville, Ky.

WALTER D. TOWNSEND, '76, Chemulpo, Korea.

FRANK D. CHASE, '81, Parral, Mexico.

DAVID S. GODDARD, '81, 125 Gorham St., Lowell, Mass.

FRANK C. MORRISON, '82.

JAMES A. HUTCHINGS, '83.

CHARLES F. HASTINGS, '88, Port Royal, S. C.

WILLIAM H. WESTON, '91.

RAUL R. DE CARVALHO, '92.

HORACE F. RUGGLES, '92.

FREDERIC W. BAKER, '93.

H. W. TYLER, Secretary.

*Boston, August, 1895.*

1 straight & yellow had 4 white  
with a few long large and small  
I took off most of had 38 straight

Chris Dyer

in acc with  
C Steffan

Item	Quantity	Unit	Cost
4 2 Pearline			30
4 CC Oil			20
C Starch			10
q1 Milk			8
Yeast			2
2 MR Meal			8
B Powder			25
Cappelin			10
Pearl			35
Ca Thoker			15
W Cheese	0.15-2.0		10
Celery	□ 2.3-3.3		12
Im Plate			15
6 Soda			10
BB Vanilla	Average 2.63		25
378 all the sh. bds.	2.9 2.9 2.6 2.7		235
	3.0 2.2 2.9 2.7 2.6 2.57 2.45 2.54		
	2.55 2.65 2.2 2.98 2.6 2.8 3.2 2.45 2.7 2.9 2.4		
	3.1 2.3 2.6 2.75 3.0 3.2 2.6 2.4 1.8 2.2 2.15		

		2 35		
		30		
		1 00		
		12		
		20		
		15		
		8		
		40		
		12		
		50		
		10		
		16		
		20		
		25		
		20		
		15		
		12		
		25		
		20		
		18		
		30		
		35		
		28		
		28		
		8.24		
			8.24	
			20	
			6	
			30	
			10	
			20	
			40	
			50	
			6	
			10	
			25	
			13	
			15	
			25	
			25	
			20	
			5	
			18	
			25	
			20	
			5	
			30	
			1 00	
			13	
			13.55	

		13 55
27	Sweet Potato	25
	Corn	18
28	Celery	10
	Dry Egg	30
	Macaroni	12
	Squash	25
	Walnuts	20
30	Rice	20
	Sugar	25
	Cream	25
	Corn	17
31	Bacon	42
	Lard	95
		<u>\$16.59</u>

**PAID.**

QL25 W10 Nov. 4/90  
C. STEELENS, L. 15 W 5m. central

377 3 pupae *Cyrtidium*, tapering from  
W to tail, cases prominent like Oxydia  
rufa, steadily horn hair represent the body  
appendages & head & also occur on the slight  
leg prominences. Cernaste flattened with 2  
bundles of short hairs. Col. brownish black.  
cases faintly creased, not shiny. Body finely  
granulated in the flat areas, repincent white.

Nov. 1<sup>st</sup> 1890

1	B Powder	25
	Corn	18
"	Tiger	13
	Bananas	15-
	Celery	10
5	Sweet Potato	40
	Squash	25-
	5 Potatoes	40
	5 Eggs	35-
	Coffee	35-
	Bacon	12
8	Dry Egg	30
	Match	8
	Celery	10
	Banana	18
	Cucumber	50
	Cocoa	25
	Oil	20
10	B Powder	50
	Sugar	25-
13	Salt	5-
	Dry Egg	92
		<u>5.41</u>

		5.41		9.74
14	1" Raisins	20		
	Celery	12		
14	Sun Sweet	25-		
	Bananas	18		
15	Squash	15-		
	Celery	10		
	Clam	15-		
	1/2 Fig	13		
	B. Oliver	25-		
18	Sun Sweet	25-		
	5 lb Sugar	35-		
	C. Starch	10		
	C. Gratin	25-		
21	2 qt Beans	24		
	1/2 Fig	13		
	Celery	10		
	2 lb Sugar	18		
	Flour	40		
22	Sun Sweet	25-		
	D. Fig	35-		
	C. Oil	20		
		9.74		
			24 B. Flour	1.00
			5 lb Sugar	35-
			B. Powder	50-
			25 1" Raisins	40
			2" Curran th	24
			2" S. Gratin	24
			1 Fig	25-
			Celery	15-
			26 C. Farol	35-
			Sun Sweet	25-
			Celery	16
			1/2 lb Butter	20
			Squash	25-
			1/2 Fig	35-
			29 B. Gratin	25-
				<del>\$14.68</del>
			Paid Dec 2/90	
			C. Starch	
			mt	

Dec. 1<sup>st</sup> 1890

1	6 lbs sugar	18
	5 lbs sugar	45
	5 lbs sugar	35
	3 lbs sugar	25
	1 lb sugar	25
4	B. Flour	100
	1 lb Meal	15
	Coffee	35
	Honey	20
	Potatoes	10
6	Cocoa	25
	Celery	18
	Squash	25
	1 lb Tigr	13
	9 lbs Tomato	8
	B. Grapes	35
8	D. Tigr	38
	5 lbs sugar	35
	1 lb Sugar	28
	B. Powder	50
	1/4 lb Lemon	25
11	2 qt Potatoes	00
	9 lbs Molasses	20

6.48

12	2 qt P. Beans	24
	B. Flour	100
13	D. Tigr	38
	Salt	10
	Matchin	8
	6 lbs Banana	20
	Clam	18
	Celery	20
	3 lbs Orange	15
16	2 qt Tigr	13
	3 lbs Orange	15
	D. Tigr	38
18	C. Lard	35
	Coffee	35
	Celery	20
	1 lb Squash	15
19	D. Tigr	35
	P. Cheese	60
	Clam	18
20	C. Oil	20
	9 lbs Molasses	20
	6 lbs Lemon	18

72.43

	12.43
22 B Powder	50
23 Kaisers	20
Currants	10
Dz Eggs	38
Celery	15
Squash	15
2" Kaisers	40
2" Currants	24
Citron	30
Dz Eggs	50
24 Celery	18
Oranges	15
Bananas	20
Walnuts	10
27 5 Pd Sugar	40
5 C Sugar	35
Dz Eggs	38
30 Plum	1 00
Yeast	2
1 Sugar	8
9 Pd Sweet D	15
6 Bananas	20
	18.44
Paid for 3/94	12
Elkstom pd.	5.56

Jan. 1<sup>st</sup> 1891

2 Lb Beans	24
5 Sugar	35
B Powder	45
3 Squash	15
Celery	20
29 lb Sweet D	25
Olives	25
C Oil	20
Dz Eggs	38
Dz Eggs	38
1/2 Crackers	6
Oil	20
Vanilla	25
4 Eggs	19
3 Pd Sugar	25
9 Min	18
1 Wafers	18
5 Pd Sugar	45
5 C Sugar	38
Salt	10
Coffee	35
1/2 Crackers	12
	5.56

5.56

20	B. Flour	85-
	Dg 74 gr	35-
	Ma Tch	8
22	1 qt Pot	18
	1 C Meal	8
26	1 qt Pot. to	35-
28	Dg 74 gr of Malassez	35-
	C Lard	20
	B Powder	35-
	Oil	50
30	Lemon	18
31	8 C Sugar	56
	5 C Sugar	45-
	Dg 74 gr	35-
		<u>810.59</u>

~~\*PAID\*~~

Feb. 10/91  
 C. STEFFENS,  
 Mr. J.

Feb 1881

4	year old	2
6	Dg 74 gr	35-
	Rice	20
	Walnut	18
	Pearl rice	25-
	1 lb Beans	6
7	B Celery	20
	Lemon	18
	Cocoa	25-
	Banana	20
12	B Flour	85-
	B Powder	45-
	5 lb Sugar	40
	Banana	20
13	Dg 74 gr	30
	Pop Corn	10
14	Oil	20
	Pepper	35-
	In Spinach	25-
	4 Cheese	1.00
	Celery	25-
	Cheesecake	18
		<u>6.42</u>

6.42

16	Aphila	9
	B. sugar	30
18	Dr Aphila	18
	W Beans	00
	Capicica	15
	Salt	5
21	2 Raisins	40
	W Curran &	30
	Cetrum	30
	1 B Crackers	20
24	2 L Sugar	45
	3 1/2 C Sugar	28
	1 Banana	20
26	Beam	12
	B flour	45
	Olive	20
28	1 Aphila	18
	Salad	10
	3 Aphila	8
	Olive	5
	Olive	10

**PAID,****March 11/91****C. STEFFENS.**March 1<sup>st</sup> 1891

4	2 lb Lemon	20
	year old	2
10	3 lb Sugar	28
	B Sugar	25
	Salt	10
	Malt	8
	B flour	85
	W Cocoa	50
	Banana	20
14	Buckwheat	15
	Pr Buckwheat	18
	year old	2
	2 lb Spinach	18
	Orange	25
	Le comit	18
17	Aphila	9
18	H.C.	15
19	C Lard	35
	C Meal	5
	1 Banana	20
20	Olive	20
	Aphila	22

16

470

21	Oranges	25
23	Pd. sugar	28
26	Sugar	28
	Yellow	25
	B. sugar	23
	Coffee	35
26	Cocoa	15
30	g. Cumin	20
		86.69

~~SPAIN~~

April 17/91.

C. STEFFEN

Perf.

~~Spa (2378) rounded conical, thickest through  
body & tapering fast. Cases large & prominent  
but very even & closely packed. And end  
rounded, great abr. striae, much  
smaller, say in same abrupt, not deep  
with little rotors & by <sup>old</sup> ~~slight~~ <sup>slight</sup> pressure reduced  
to a bunch of short hairs no hair, slightly  
curved outward. All fine, a smaller  
one like malacop. test. cases & little  
paler. L 25 mm w this of max. width at  
2 movable incisive zones (the incisive are  
well marked but the first is scarcely movable  
very coarse of first), while the other are smooth~~

April 17/91

2	Apples	22
4	Oranges	25
4	B. Powder	25
	Orange	30
	Sw. Spinach	20
7	C. Cil.	20
	H. C.	15
	Salt	5
	Molasses	25
9	Sw. P. C. O.	18
11	Oranges	25
	Sw. Cumin	35
	Salt	5
13	W. Beans	50
	Orange	25
14	W. P. C. O.	55
	Wine	15
	H. C.	13
15	C. Cil.	12
17	H. C.	15
20	Coffee	18
		4.66

Oregia 362 Note 4.66

Notes

21 Stephen  
IR

(Q) 3. 3  
Eggs  
Black & white

8 342.C not 1894 May 1

342.D until 1895 p. 12

362 pair 3 black & white

Black & white

still not hatched

May 10 the 3 are still not hatched

362 May 16 dying off like the

May 21 all dead to ground

May 21 (17)

May 20 one al. on back slope

X the stuff in the nest - the  
black part is to be right

Z from

Z June 4 (11) more open  
no cinereous

Y

Y

342

342.

+

B 5 by morning (10 AM) Hatching on R 1894

AB three birds

AA two pairs birds

Hatching 11 AM "

Hatching 1 PM "

5-  
10"

10"

10"

10"

10"

10"

10"

10"

10"

10"

10"

10"

10"

10"

10"

10"

10"

May 1894 aged lot of 10 males BB, AB, AA.

342.C 1 black, 3 white = normal yellow

342.D 2 " 2 " = trans. ad cana

hot mating of both these pair which began  
to hatch May 6 1895 (lost each)

" 12 young " upper & " pink " 5.55

" 10 " " " " " 7.00

" 10 " " " " " 6.50

" 10 " " " " " 5.50

" 10 " " " " " 3.50

" 10 " " " " " 3.50

376

first appearance in nest with back, al. &

black white contrast with lateral white.

Third week 3rd streak broken by a

streak ferruginous place on ③ Lateral

the old large white will disappear

④ Guttated for distinction between

old white & old blue, contrasted,

broken from the old, at middle of

back blue red & yellow

blue and white till 1st stage

342 C June 1895 ~~May~~

May 13 2 black 2 white ~~III~~ <sup>II</sup> ~~III~~  
1 black 3 white ~~III~~ <sup>II</sup> ~~III~~ ~~III~~  
still not defined ~~III~~ <sup>II</sup> ~~III~~ ~~III~~ ~~III~~ (68)  
[The  $\frac{2}{3}$  are all small, the first two fair  
or absent and may be 1 black, 2 white ]  
May 17 2 dead, took out; white 1:3

May 21 2 black 2 white 11  
black 3 white ~~III~~ <sup>II</sup> ~~III~~ ~~III~~ ~~III~~ ~~III~~  
still not defined 11 (89)  
[one of the  $\frac{2}{3}$  still not positive] isolated  
2 & three  $\frac{2}{3}$ . One died May 24 came out  
black 3 white, the other died, apparently  
a true  $\frac{3}{2}$

First cover June 1 1895

June 4 16' covers (30 larvae)

only 88. 19 pupa but  
died

342 D June 1895

~~Parthenix~~

May 13 2 black 2 white 

1 black 3 white

still not defined 

[one of the  $\frac{1}{2}$  was dead and removed]

May 16 dying off like the *Cissampela*

May 21 2 black 2 white 

(20)

May 27 (17)

May 30 several in last stage.

The tuft on ♀ preceding the  
black pencil may be light  
brown

June 4 (11) more open  
no images

Vancouver lot admir

all tufts constant 2 & 2, though  
brown may replace black and yellow  
white or other ones (see description)  
Almost all 2 black, 2 yellow in IV but  
some white in I

Beginning to come May 13

SECRETARY, SAMUEL HENSHAW,

of B. - white B. - black a few feathered hair <sup>occasionally</sup> enclosed.

A list of the officers nominated at the last meeting is

most of the large & have traces of the side tufts.  
more or less distinct. Some seen with none.  
Lated to Agaricus campestris.

Prof. W. G. Farlow: Edible forms of mushroom re-

cogn. always double PAPER:

ELECTION OF OFFICERS FOR 1894-95.

REPORT OF THE WALKER PRIZE COMMITTEE.

Eggs hatched Fall 1894 and scattered out  
about a dozen went over & hatched  
in May 1895

Bird 1895

MAY 2d, at 7 $\frac{3}{4}$  o'clock.

THE ANNUAL MEETING WILL BE HELD WEDNESDAY EVENING,

Stage I wants & shows only. Hd m (bind 3)

Stage II relative to trachea (May 19)

grown up and a few open; no images 1894.

BOSTON SOCIETY OF NATURAL HISTORY.

Apr 1894 About 100 larvae of mixed  
BB AB and AA from 342 A & 342 B  
May 4, mostly in third stage, the majority  
black & three white tufts.

{ 18 with three black, 2 white tufts  
{ 2 " 3 black (4th not described)

Isolated three May 4, all instant in  
spite of moults, except 3 "white" molted  
in 2 came black and one 2 black tufts.

[white & brown interchangable - black & brown do  
so there are only 2 tufts.]

342 C = Black, 3 white, annual gutta

342 D = 2 " 2 " trans. ad. cane

342 May 7 some 2 stages tufts all white  
Some 1 black 3 white molt pale brown, 3 white  
greenish red front tuft pale, one white, the other  
one with a trace of brownish, another (only 1) with 4  
brownish yellowish ones, this last darker 2 white  
but with white yellowish or next to black, gray on side of tuft  
342 D May 7 may molting, no molt, (E)

May 10 One molt, nat, tufts all white with  
dark ends (F?)

Cocoon single, with no outer preliminary layer

(1) 3.5 mm (2) p. 2 mm or more (3) 20% molts to

See back a lateral view

Origia 362 Vita 4.66

21	Cheeks	5-
	Bananas	15-
	Berrys	50
	Squash	12
		<u>5.48</u>

♂ ♀ Paral 3,48  
G. Steffens  
G. M.

362X=Plattsburgh nova + Port Townsend nova

362 Y { Nanaimo badia + Nanaimo badia  
noted " " " " "

362 Z { Plattsburgh now + Manaius baden

Obtained in July 1893      Hatched in 1894

XX four birds

XZ two birds 1 Apr 18 1894 older Intergral  
Gulf Coast Fall 1893

ZX your bros (1/20) (also put in val 1955)  
Nat Soc Apr 20

22 Three Birds Notary Nov 19

YZM X true to size 11 Apr 19

YY ten broods now hatching from

342 Blot of grass *Ogura* from Dr. Behr "Caro"

342 A one set eggs from ♂ O. jamaica BB342 q.v.

BB Bixby's (Dr) Hord Hatchery Nov 1894

AB three words Note 10/19

AA tree-creep + birds Hatch -> f kzo 1

Aug 1894 mixed lot of 100 larvae BB, AB, AA.  
342C 1 black, 3 white = normal glossa.  
42D 2 " 2 " = trans. ad cuba.  
Not maturing of both these pure which began  
to hatch May 6 1895 (1 set each).

1693

376

Leucocarpus americanus Blanckenhorn  
var. luteus (L.) Gray. Flat-topped, branched,

annual, rounded & a little smaller than me,  
somewhat prismatic from pressure, smooth pale

slate gray, covered with hairs just 10X.4x.3 mm

Collected April 30, 1893. Head round, flat-topped

underneath slightly long, black hair.

Leaves few, several pale hairs w. 4 mm

body slightly flattened, tapering post. with  
distinct ad. shrubs on s. Whorls dull

black, th. few or little paler, covered with  
sparsely short, long white hair. Lvs. 2.5m

in the style and with the pale of new  
the increase of air makes the body look

traversed, and the shrubs as seen  
to arise from distinct mouth of body tubercles,

and of the body. Lvs. 1.5, a shrub on each side

single tubercle, oblique, it is thin -

well as the others will fit in the

body and a shrub on each side

the shrubs in the place of above the

body. Lvs. 1.5, a shrub on each side

body and a shrub on each side

the shrubs in the place of above the

body and a shrub on each side

the shrubs in the place of above the

body and a shrub on each side. The same  
shrub in the place of above the

body and a shrub on each side. The same

shrub in the place of above the

body and a shrub on each side. The same

shrub in the place of above the

body and a shrub on each side. The same

shrub in the place of above the

body and a shrub on each side. The same

shrub in the place of above the

body and a shrub on each side. The same

shrub in the place of above the

body and a shrub on each side. The same

shrub in the place of above the

body and a shrub on each side. The same

shrub in the place of above the

body and a shrub on each side. The same

shrub in the place of above the

body and a shrub on each side. The same

shrub in the place of above the

body and a shrub on each side. The same

all for her first out  
of nest.

She was collected October 2 1913.  
was said it was very ugly, like a  
tiny blue jay, but of much a larger  
size and more robust. She is made  
of deepest & bluest steel blue. Lateral  
stripes white, wavy, dotted  
with black dots above which a yellow  
band between two black, claspers  
reddish, blue below with white  
spots. In some bands white spots  
and wavy

black.

Tail very long  
Material used for 1913 in this bird was probably  
the same - a blue & dark brown & white pattern  
like a row of caterpillars. Two blue white patches  
but more of the black dots in front. The red blue  
dots (long) associate with the blue marks  
below them. There is also a little blue at the  
tail base front on legs or feet these dots are not  
conspicuous. The black dots are conspicuous, being  
situated nearly centrally in sq. in a black mark  
the rest of the tail line are a dark blue black.  
mostly absent. They are all blue, wavy & irregular  
red dots, scattered, scattered in all, in the vent, especially  
at the dots, near the vent. Hairless black, blue  
on back & sides. The dorsal body feathers which  
are blue, numerous, black central and in the anterior,  
not running along above the blue dots. The blue lines  
~~which~~ <sup>which</sup> extend posteriorly across the back are broad  
blue streaks, near white. These dots are very small,  
more extensive, but the dots & broken by a trace  
like dots the body being immediately below it, colored  
blue & yellow. On lateral parts head bent to the  
transverse, slightly bent. Lateral rays black with  
yellow & blue dots blue streaks, red. Dorsal in the  
body red & blue black & white below &  
black & yellow, with blue dots on blue body 364  
white body without either of these, just  
blue exclusive of a few transverse dots. The  
blue with white dots with black dots.  
On the abdomen, dorsal white blue streaks, just  
near d. blue may be broken up into short lines  
and dots. [See page 106]

Began to rear June 6 Birney Jr., 2

Calc. 6 1.0 1.67 2.78 4.6 7.7 nat. 60  
 Found 6 1.0 2.0 2.8 4.5 6.5 -

577

Only the higher eggs of the following week had the same effect.

Egg I found, placed on moist  
soil - shiny bird in view.

Widely spread live shrubs and  
deciduous trees of West African savanna.

but I'm afraid you will be disappointed.

watched the river round the lake,

W. purple leaf, brown, densely clothed with short fine hairs, smooth at base. Roots

large, being many from those of a <sup>similar</sup> <sub>size</sub> which

long, - with very very wide  
openings, head, 96 and long - like  
the last, but shorter, and more

class, & the girls who go to the door like  
to give them quite a good appearance.

and the upper part, appears as  
quartz veins. These are like the fine  
grained veins of the sandstone.

\* Another species of bird which has been the  
same both times. The back are glossy white

should be bed of steps with pointed ends.

Order, June 1864.

(See) 1st for Pigeon. The 2nd bird shown here  
was noted April 29, 1911.

With the following from the daily paper  
it was decided to combine the two cases.

220/120-1 (2) each 7 m x 7 large  
blocks the standard size.

Weston 20 May 1960, 1000 ft. S.W. 8 am, 7, 2000

5-8 afai - small red pale spots scattered  
here & there on 1/3 cu. a single leaf. 11/2 gal

one. Body, brown, with red band  
around middle.

S-V went. Legs & sides & the other, apparently  
very small. Ear membranes large & well

placed here with the other, according to the  
order of the original manuscript.

short, black & white wings. On 7-8 June  
near the same locality I found a pair

of which lateral line, Macleay's, replaced

② Lake Superior Provincial Park  
③ Lake Ontario, almost frozen @ 60°

Mr. H. C. T. had a very difficult time of it.

met at one end of the field, right end, a little to  
right of center, the 5-d then ran & did not

With regard to the last letter above, I am now

He died - Sept 18, 2000 and fell in the  
hands of the Devil. Rest in peace.

and pale brownish-yellow, with a few small

yellow and the ground color pale 5-11,  
covered by a brownish red skin layer  
on f. 5-7; then patches brownish black  
and yellowish with 3 centers in the place  
of the white ones, giving trace of brown top to  
the small dark reddish blotches.  
On 10 & 11 a single large wt. blotch is the  
center of the white patches. Hair on 2, ②, & 11  
③ very long, produced forward, but gradually  
falling back. ④-1, ⑤-4 ⑥-5 On 5-12  
⑦-10 reduced. ⑪-13 three nests, 1  
nest ⑩ on 2-6 & 12 and ⑪-12 on 13 blue  
blotches, ⑫ on 7-11 are dark reddish black, the  
rest are whitish or tan yellowish pale.  
present hair about a stiff, pale, thin fibrous  
hair, large & wavy and varying black  
with all brownish reddish appearing -  
white ⑨-10, ⑪-12 blue blotches ⑬ about  
half hair ⑭ all rounded, brownish, tan, or  
white & black mixed in a mixed  
coloring of it; a broad no skin  
layer ⑮-18, ⑯-20 wide skin layer  
blue with white band, brown  
and black ⑰-20 and ⑱-21, ⑲-22  
greenish ⑳-23, ⑳-24, ⑳-25 before  
the 1st molt.

Specimen No. 3.6, 30-71, f. 14 with 6 hours to become brown  
and made 6 pl. 1. Specimen 3.6 in the  
1st stage mottled all over with yellowish  
brownish skin, tan, whitish, yellowish  
rust ① 2-6 blue black, ② on 2, whitish  
③ on 7-12 pale w. color. The rest yellowish  
pale colors. Hair long, thin brownish  
black & white, some red brownish brown.  
Red tints on 5-8 yellowish, 10-11 orange.  
hair ⑥ is a yellowish black, rest, above 10's.  
The stomach is concealed by the large curved  
strands formed by ③ & ④, ⑤, ⑥, ⑦, ⑧ Above the  
large lateral want on 2 (concentric) a spot yellowish  
C-shaped marks may be more extensive, or con-  
centric bands but median entire. ✓  
Hab. 1st stage (3.6)  
Hab. 2nd stage (3.7)  
Hab. 3rd stage (3.8)  
W. 4, Penn. Body black thickly dotted with  
white yellowish red spots, mostly on sides, the  
specimen quite the best painted in black  
and reddish brown. Vast majority black  
③ on 2-12 nests on 13-16 dark blue. ④ on 7-13  
dark blacked the rest black whitish yellow  
Hair long, the long white coarse ⑤-12  
black & brown mixed which is a good  
projecting point want ⑩ on 2, ⑪-12 ⑫-13  
rest, in front, red, a good fit, with blotches on 5-8  
which are first yellow, a some brownish  
from 9-10 large black red and black on 10 & 11; ②  
large dorsal ⑩-12 colored, ⑪-13  
14-15 ⑫-15 hair ⑬-16 small & red  
dotted with black, but on dorsal 14-15  
16-17-18-19-20-21-22-23-24-25  
most nearly 40-50 same, variegated black  
color but lateral sunset into 2 large patches which  
are each separated

Calc 1.68 1.06 1.67 2.65 4.20 var 63

Var 2.7 1.0 1.7 2.6 4.2

Over 6 ft. 378 = 348 = 333

Egg-shaped, thick, yellowish

leaf with white ring around leaf

stem. Leaf base is orange and pointed

at the sides, not at the bottom but

flat in the long anterior lobe and

slight depressed centrally at the

margin. Leaf smooth shiny green brown,

covered with a white spot from below

and on the narrower sides & from a

disturbed rug around the top surface

which is a dark brown by older

leaf 1.8, broader central 1.6, at top 1.1;

minimum diameter at top .8, at top 7 mm

at the very small basal lobe.

Leaf dull yellowish green, 3

mm. long, 1.5 mm. wide, 3

over 6 ft.

.7-1.0-1.2 1.4-1.8 2.2-3.3 2.5-3.2 Calc.

6.6, 8.4-8.7 11.5-12.2 2.2-3.3 2.5-3.2 Calc.

1.6-1.9-2.1 1.1-1.3 1.4-1.6 1.6-1.8

1.6-1.9-2.1 1.4-1.6 1.6-1.8 1.6-1.8

1.6-1.9-2.1 1.4-1.6 1.6-1.8 1.6-1.8

1.6-1.9-2.1 1.4-1.6 1.6-1.8 1.6-1.8

1.6-1.9-2.1 1.4-1.6 1.6-1.8 1.6-1.8

1.6-1.9-2.1 1.4-1.6 1.6-1.8 1.6-1.8

1.6-1.9-2.1 1.4-1.6 1.6-1.8 1.6-1.8

1.6-1.9-2.1 1.4-1.6 1.6-1.8 1.6-1.8

1.6-1.9-2.1 1.4-1.6 1.6-1.8 1.6-1.8

1.6-1.9-2.1 1.4-1.6 1.6-1.8 1.6-1.8

1.6-1.9-2.1 1.4-1.6 1.6-1.8 1.6-1.8

1.6-1.9-2.1 1.4-1.6 1.6-1.8 1.6-1.8

1.6-1.9-2.1 1.4-1.6 1.6-1.8 1.6-1.8

1.6-1.9-2.1 1.4-1.6 1.6-1.8 1.6-1.8

1.6-1.9-2.1 1.4-1.6 1.6-1.8 1.6-1.8

1.6-1.9-2.1 1.4-1.6 1.6-1.8 1.6-1.8

1.6-1.9-2.1 1.4-1.6 1.6-1.8 1.6-1.8

1.6-1.9-2.1 1.4-1.6 1.6-1.8 1.6-1.8

1.6-1.9-2.1 1.4-1.6 1.6-1.8 1.6-1.8

1.6-1.9-2.1 1.4-1.6 1.6-1.8 1.6-1.8

1.6-1.9-2.1 1.4-1.6 1.6-1.8 1.6-1.8

1.6-1.9-2.1 1.4-1.6 1.6-1.8 1.6-1.8

1.6-1.9-2.1 1.4-1.6 1.6-1.8 1.6-1.8

1.6-1.9-2.1 1.4-1.6 1.6-1.8 1.6-1.8

1.6-1.9-2.1 1.4-1.6 1.6-1.8 1.6-1.8

1.6-1.9-2.1 1.4-1.6 1.6-1.8 1.6-1.8

1.6-1.9-2.1 1.4-1.6 1.6-1.8 1.6-1.8

1.6-1.9-2.1 1.4-1.6 1.6-1.8 1.6-1.8

1.6-1.9-2.1 1.4-1.6 1.6-1.8 1.6-1.8

1.6-1.9-2.1 1.4-1.6 1.6-1.8 1.6-1.8

1.6-1.9-2.1 1.4-1.6 1.6-1.8 1.6-1.8

1.6-1.9-2.1 1.4-1.6 1.6-1.8 1.6-1.8

1.6-1.9-2.1 1.4-1.6 1.6-1.8 1.6-1.8

1.6-1.9-2.1 1.4-1.6 1.6-1.8 1.6-1.8

1.6-1.9-2.1 1.4-1.6 1.6-1.8 1.6-1.8

July 23 without ~~any sign of cover~~  
any sign of cover  
& without entirely  
ground

Adult ♀ (hd 3.62, shield 2.4 mm) same (adult)  
as before (hd 3.8, shield 2.6 mm)

*Phytomyza* sp. - 1  
Body green with some brownish spots,  
3 bristles on head.  
Spines from on 2-6, 11; 3 pairs 7-10, 12, 13 on  
12; 14 pair. & 3 pairs @ small and  
2-3 on 13; 1 pair on 14, not a short  
blow-spine.

Process type A, rosette type: shaft very  
short, some 20 kg, a brown quill with black  
head tip & a grey central black part with  
a small white hair. Length 20-25 mm.

Type 3 - In the shape of a long thin stalk  
with 4-5 rows of 10 blackish  
dots, arranged transversely, so as to  
form a ring. Tipped in front with a stiff  
brush of ① 1-2, ② 3, and ③ 4. The  
two latter are always white.

but for a short time, but so  
long as the sun is up (about 10 hours)  
and the fish come in, fed on the flats  
and are scattered about the island,  
and the water is flat, quiet, and  
as smooth as glass, the stoppers fall

Opposite side of leaf with no ventral side  
rather thick, stiff, almost woody, rounded; joint edges  
of petiole and rachis rounded; lvs. 10-12 mm. long,  
about as wide, with thin thick spine at the joint  
terminal spine 379 L. 14 W 5 mm

Eggs from old fishy, white, or yellowish  
said to be whitefin trout. Fish may  
weigh up to 6 lbs. The body is of olive  
salmon pink - brown grain. Gills black  
dotted with white. A slight dorsal fin on  
body. <sup>On the dorsal and anal fins</sup> Scales to be  
shiny tan also. Egg white. Base of tail  
the color becomes bluish green. The eye,  
the lower part above by beam passing  
as a black spot of reddish color, and on  
an upper one to the outer  
bands about eye pale yellow.  
Hatched young have a reddish brown body  
the top covered with a dark reddish purple, and  
color fading off towards bottom, skin pale  
long narrow white, narrow and flattened  
yellowish, the rear ones long, slender,

On the 1st of April, 1862, I  
left Washington and went to  
the front, where I was to remain  
until the 1st of May, when I  
was sent back to Washington.

red paper, mounted under glass between 2 over-lapping pieces between st. & 4. C. ate a lot.

St. Spur the fore. tip of a long  
mallet. He put a front and a rear cap,  
and a band, skin black, well fed.

W. now & normal, cast anal plate black  
below & above but the caudal color is deeper.  
The dorsal fin color (about 8 or 12) is greenish  
or yellow a narrow band being down the  
dorsal muscle on white body, with  
large brown spots, pale fine.

Spur was used w/ q. Take the  
red col. from back and all  
~~yellow~~ <sup>yellow</sup> black skin. Others  
remain & typical pattern must be preserved,  
very. Holes & fins. w/ 1.3 mm. Scream  
area with black Q: Q on 2-4, 5-7 & 13 and  
yellow pale at 9-10, 11-12 & 14-15  
more or less. Dorsal area almost  
absent in 5-7 back (caudal a few  
red, cast anal plate pink. The  
& 8-10 pale yellow line, some red areas,  
the 11-12 dorsal & 13-14 anal. Long  
narrow sp. took on hand, also, the  
short hair from the skin are pale.

Color - (not stained), either red and  
grey, grey dependent. Head and first w. 32 mm  
coloration with darker brown reticulation.  
Grey especially of jaw black. Opercular  
color different, & is slightly darker below.  
Barbel white, long hair only few touch  
short purple on front skin. Barb. normal,  
4 foot spur, O-G 51, all bright yellow  
Body brownish purple, marked with white  
forming a broad band with 3 main  
purple bars (d & 13, 14, 15) and a num-  
ber of small beside mottling through & next  
O-G in 12 are dark. Central bar  
around O-G except at 1-2 shaded with  
red pale, which give the color & the  
rest the appearance is uniform white with  
with spots of pale purplish & then white  
brown & look like they are very small  
at 15 & 16, 17. Dorsals are, with a yellow  
area O-G on 3-4 (at the angle of 4) 6-11 the  
rest all the same to black. Speculum black  
bright & 18 on dorsal it bright & 19-20  
long <sup>long</sup> 21-22 all between 20-22, thin, slight  
yellow & 23-24 transverse reddish brown & 25-26  
Dorsal & Caudal, gill & lateral are seen on  
extreme right

Cube .98 1.48 2.2 3.4 5.1 water .66

found. 1.0 1.45 2.15 3.4 5.

380

~~Not found at all from C. & G. M. in~~  
~~My notes say. A small, stiff, pointed~~  
~~spur about 1 mm. long, 1.8 mm. broad, 1.6 mm.~~  
Smooth, white, not strong, with irregular  
breaks & a brown substance from mouth.  
Holes of a hole in one end.

Natal. 12 November, about a mile west  
of the river head at water but very shallow  
in front of long black bamboo poles. A few  
bamboo stems 18 ft. high stand, most  
are very large, the rest quite small.  
Coloration black! we are still covered by  
a mass of thick stiff grasses, strong black,  
slightly swollen at top and bearing a bunch  
of spreading pale hairs very similar to  
those on the stems of about as great length,  
but not longer on the reg. 10 ft. or so  
high now, & I find more & more on

He and John C. H. Lester with the  
Highland Game Farm went back, and  
found no sign of them. It is a  
big place, and there is no one to  
look after it.

grows to a very pale brown, ~~the~~  
yellowish green body only in a few  
dark bands on each segment, made by traces  
of the midrib corresponding to the bases of the spines  
but often very. Spines in 4 rows on 2-4, 3 or  
4-5 a single dorsal & 2-3 ventral plates.  
Process cylindrical, not as long as 2 ventrals, has  
a bend at top gradually at spine,  
with enlarged conical bases & all the bases  
are situated on the single dorsal. Spines  
as long as the processes but longer. The  
first, the anteriorly & posterior with the  
spines all oblique. Spines white  
with black edges. In male, but not in female  
quite a plate on each part <sup>the</sup>

Light blue with a large  
field of yellow-orange over a  
background of blackish-blue.  
Size: 24 mm. pale green.

derber around base of <sup>process</sup> spine, a row of black dots, 2 per seg. except 1 per seg. post to spine. The first black proceed <sup>the black</sup> up for length, then the spine about as long as the next c. (to before on 1/①d 2) but ② 5-5; on 13, 2 each side; on 14 (now 1 and post), 1 each side). Spines on 3-5 are slightly thicker than the others. Abd. feet yellow, clasps brownish & a few ventral black spots. Spines white with narrow black edge. Process <sup>the black</sup> black  
post to <sup>the black</sup> Head same w 3 mm. body bluish green. Black dots same but reduced, in our example obviously connected to a very slender process. Abd. feet yellow & brownish black. The last, basal joint of abd. 2 brownish black. Abd. feet yellow & brownish black. Spines not more than  $\frac{1}{2}$  or  $\frac{2}{3}$  as long as the processes which are black, a few short hairs near to at base of 1/④. Lungs 4 rows 2-6. Setae all  
① S-d on 2-11, 13-14, Dv 14, 1; ② 13-2-12  
③ 5-9, 2-12 ④ 5-1, 2-6

Process & 3 rows all shiny black except ④ on 3-5 are pied with yellow on the shaft. Spines white & black edge ~~but half~~ <sup>1/2</sup> not full, meeting anteriorly without contact, otherwise grey and shiny with a small black spot over scutellum on anterior streak and sides claspers mostly white. W. 5? mm. body long, black, cylindrical, slightly elongated at the 1/12; legs orange & on 13 & anal plate, get much green. Body bluish green with a gray tint. The feet yellow green with black tips and will be green outside. Process ④ on 3-12 greenish yellow, black <sup>anteriorly at the</sup> pale & <sup>posteriorly</sup> blackish white, shading into pale blue at base, all the terminal spine black as well as the short midribs, ④ on 2 on ② 5-5. The spines are all short (& process on tail) & are few & absent. Only the apical one is present on most of the others. Process black & behind the 1/④ ② on 3-5 and ④ on a large & round thick than the others & posteriorly the marginal spination like as short spines black with separately from wiz apical spine & 2 concentrated over of anterior ones. Spines elliptical, white with black tips.

Reported on July 23

In egg May 1 1947 ♂ S. glauca  
and ab. late autumn 1860

38.5   65   85   115   160   22   -8

381 *caesaria*

Egg laid by *Heterodon platirhinos* (♂) 1000 ft.  
Miller Valley, Miller Co., another (Recd per 12)  
Cottontail, no. 1000, 1000 ft. (See sketch)  
Showing a very yellow breast, 55 mm; height,  
16 mm. Laid yesterday.

Spotted sandpiper, all black below  
paler on the wing-coverts, rest, esp.  
on head, dark slatey grey, very  
slight, though, from the right, black  
and white feathers laterally, and  
a white bar on the wing-coverts.

v3. ~~at~~ Same Hd. & same as you have  
just one line and nothing. ✓

Wlf Jek 3 21.8 mm. (tail included)  
Entire body black with 10 broad  
yellow bands, especially 3d and  
4th. Black, glossy, - like pale

d. was red hair between the warts.  
Hairy Nodules black & white  
2-3 mm. long. The warts are  
pale. The black begins to go pale.  
~~most~~<sup>(Shrub 1.15)</sup> of them, w. 1.2 mm. Most black  
5-d. pale last. And all the warts very  
large, shiny black. A range red &  
lime, ending at oval plate & csh.  
Hair stiff, short, black, pale as well  
as few long hair first.  
No 61, 18 all deep black except the  
curious bright red dorsal line like  
a little gather, & 5-6 hairs pale. Hair  
thick, mostly black, heavily barbed except  
a few low pale black hair <sup>(Shrub 1.63)</sup>.  
Shiny black. Most broad 1.63 mm.  
The warts (2) have shiny blue black  
base, the top punctured a bearing the  
hairs. Warts 2-3 are also elevated, but  
the bases are fleshly & smooth, giving the  
appearance of obscene female bands. Up  
of the warts deep black. The red d-band  
becomes yellowish white in the no-  
crossover, forming cross-bars on dots. ✓

Lateral area grayish, against which  
the back shows the white contrast.  
Hairs  $\frac{1}{2}$  in.  $\frac{1}{2}$  black, from shading with  
gray, white, from  $\frac{1}{2}$  pale salmon  
to  $\frac{1}{2}$  black from the center  
slightly reddish.

No. 716, 24 in head 2.3<sup>2</sup>. Same pattern as  
last and d. band not distinct. Base of neck  
 $\frac{1}{2}$  distinctly light reddish, contrasting and  
with a broken d. band. Scales on area  
below  $\frac{1}{2}$  not so white yellowish, then  
a hairy gray. Base of neck  $\frac{1}{2}$  not.  
surf. All red scales on head black.  
No. 717 Head sun black w 287 mm.  
Red black, mottled with white, heavy  
d. band red band below white the  
rest gone distinctly light red, highest  
at the knees, the hair very white  
gradual transition to black.  $\frac{1}{2}$  red black,  
d. band rather broad, very blurred,  
becoming yellowish white in the center  
and the color is not seen where the  
scales are cut across. There is no red  
above d. band. Hair smooth shiny

eggs as also the base of neck 12  
parts  $\frac{1}{2}$   $\frac{1}{2}$  reddish then  $\frac{1}{2}$  hair  
white, tail clift, black, becoming pale  
gradually and pinkish red from 3-4 parts  
base about 20-25 mm long. 41 below  
upper large, black hair between edges of pale  
lines of neck & at d. band pale salmon.  
The fur sliver black  
well pushed up several hours and re-  
set after broad covered a surface of  
about 10 ft with stems, a large rectangle red  
with other broad smaller yellowish.  
Pupa cylindrical, no d. d. opening  
18x25, color blackish orange, with  
a whitish base, covered a short  
& thick, skin of cocoon, with a tuft  
of spiny hairs.

*Obolear deni*  
Aug 29, 1913. cat no. 9456

Nov 16 1894

See *xylosteum*

Plant ~~specimen~~ or ~~specimens~~ of the ~~seed~~  
billy, pinkish brownish white  
leaves, late to reddish, round green  
and shiny, with very long petioles.  
The leaves L. 16 width, height 1.0 mm.  
The "spiny" stipules (or are) entire  
and short, with rough edges.  
All the stalks and the most  
yellowish ones very spiny.

With small leaves, but the  
bottom white leaf, coarse hair very  
black, and to very small strobilus  
which is now ripe. It has got  
holes made with the ~~spines~~ ~~spiny~~ leaves.

The strobilus is the, covered  
with brown hairy scales which  
greenish, like the body leaf, are  
covered, covered by short hairs,

yellowish white. When it is not green  
redish brown. Consider 2 mm. long  
widely, and the strobilus is black.

Not seen to have any  
fruits.

.68 1.14 1.7 3.16 5.26 7.6

round .7 1.1 1.9 2.6-8 3.6

In 3 days I made another specimen  
but the leaves were very  
large & green, & a pair of  
yellowish spines. The red and yellow  
leaves were 1.6 mm. long, and the black  
leaves were 1.0 mm. long. The  
spines were very sharp and  
sharp, the body leaf was about 1.0 mm.  
strobilus 1.6 mm. long, black, &  
the leaves were 1.0 mm. long.

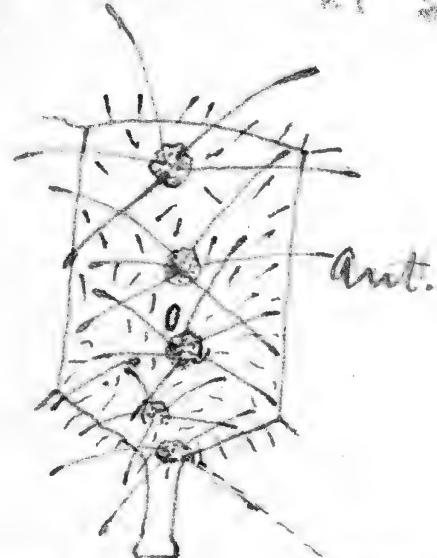
But the leaves had very sharp  
edges and large red spots. (1.6-2.8)  
before the other plant, (1.0-1.2)  
possibly a new leaf, are very large, &  
white. It was first white, then  
brown, then brownish brown, &  
then brownish grey down to below  
now it is red with streaks. No  
more greenish like the body leaf.  
When I was writing, I was not  
able to write the name  
of the plant, so I looked  
at the leaves. The first one, the  
leaves are like this in color & shape.

prominent, a double carinate ridge high  
with bases & near the middle a notch  
where it is a costiferous post. In a row of 5 d  
carinate tubercles, each with a short seta  
a small flattened process on their sides  
or hairy & smooth longer one on the left  
ab. sq. flattened laterally & furnished with  
5 pointed like saw teeth. (it is 12 mm high)  
The middle one of which is longest & stirs up.  
Color a bluish green, the process - 1.5 mm  
& 8.5 mm. w. this 2 mm, abd central 1.5 -  
Imperial Jan 26 1893. Cat. No. 9057

# *Uroptilos periscelidactylus*

384 / was loaned to me by Dr. G. M. Allen  
from the U.S. National Museum. It is a  
large, slender black bird 10.5 cm. long.  
The greater wing-coverts are mostly white  
and form a wide collar to gray & D. feathers & back  
of neck & sides. Next just behind the  
shoulder collar pale yellow. The rest of the body  
yellow green. Downy with black. wt. 2.8  
g. Age? I would say 12 or aged to 13.  
would just now molt into feathers in a  
manufactured manner. Other small  
details. The brain, also it is in  
immaculate condition. The feathers are  
still in

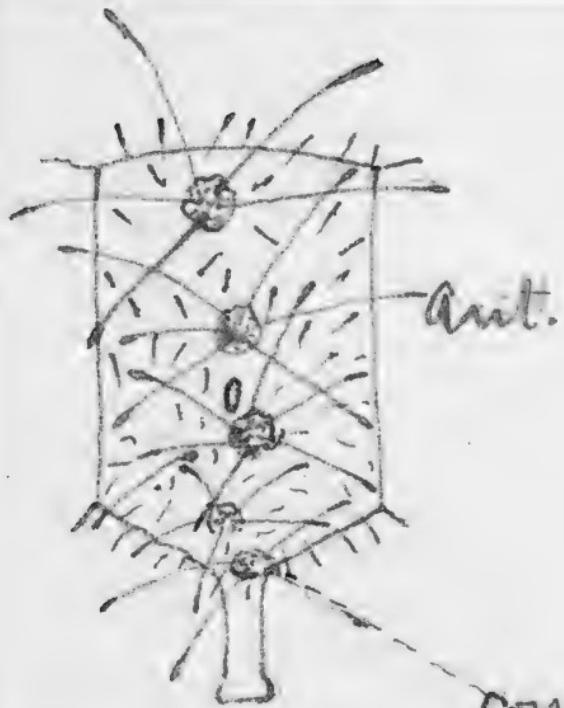
\* (July 19). A pale yellow flower was  
discovered in the big patch. It is about twice as  
large as the yellow ones and is  
decorated with pale yellowish-yellow spots -  
one on each of the 11-12 triangular petals.



last want on legless segs. correspond to  
VII; VIII not.

BB 383 *anywhere.*

Pterophoridae



Corresponds to  
last vent on legless segs.  
= VII; VIII not seen anywhere.  
BB 383 (Singer 97a)

Tetranychidae

ut Miss Zella Peabody is a Graduate  
of the Playing, having pursued the  
branches of Musical Study under my  
I fully recommend her as an Instructor

CHARLES H. WEBSTER.



Hol. 2 yellowish brown white d. & Sty brown  
at anterior edge towards large black, a little  
pointed, non carpal; setae distinct, pale smooth  
& simple, rather long. 12 arranged  
i-vi viii 3 in leg plate No other form

Hd .75 yellowish white line very faint. Throat  
blackish, slightly concol, sides emarginate  
anteriorly. Same but character less developed

Hd.5 yellowish, Hd. tubercles tattered than the  
latter well marked, large on both sides and  
star same [see later 1819] - 2.  
66

.38	.53	.80	1.2	1.8	2.8		<u>164</u>
.5	.75		1.2		2.8		<u>164</u>
.32	.50	.77	1.2	1.8	2.8	.65	<u>184.8</u>

~~1108~~ 1108  
~~088~~ 088

Mrs. H. G. Dyer,

City

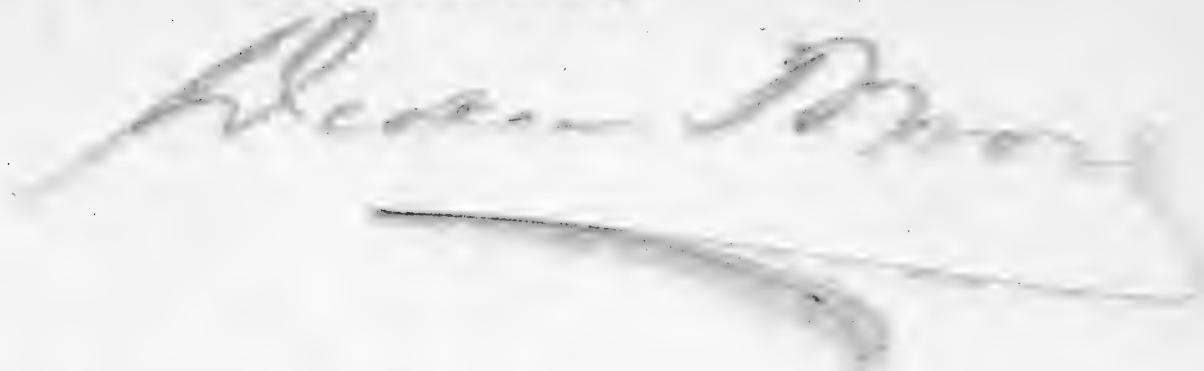
Madam:

Your favor of even date enclosing check  
for \$25.- in payment of rent on Piano is to hand  
and we have duly placed the amount to your credit.

Please accept our thanks.

We shall send a tuner to attend to the Piano  
on Monday as requested.

Yours truly

A handwritten signature in cursive ink, appearing to read "Helen Dyer". It is written over two lines, with the first line being longer and the second line being shorter and ending in a flourish.

Wings pinkish grey, marked orange, Hd  
pinkish brown at bottom of two sides,  
the rest yellowish brown, greenish  
and in median white dot a faint  
vertical band of yellowish spots.  
W. 3.6 mm., black, annulated, on the  
first edge of 2 & 3 an elevated band streaked  
with blackish <sup>yellow</sup> with soft whitish green  
and black by incorporation, dotted with  
white, <sup>black</sup> uniform colour, each  
molemark marked by a narrow distinct black  
line, & continued by a white shade to the  
middle drawn through your reading  
line, the dots disappear later  
here, then red orange, black above before  
it at top of the red whitish with few  
large. Abd. black with yellow & black  
spotted, with pale veins  
brownish, the wings in winter 4-5.  
brownish, blackish, annulated.

Image May 16, 1894. Folsom, Calif. Cat no 10882

Widening by the side of the road  
on May 22nd 1900.

361

Trunk brown or brownish grey, pale  
inside, & slightly blotted, convex on front,  
higher than wide, thickest above the middle  
& deepest below. Back green with a faint  
brown tinge, scutellum black with stripes, a  
few hairs. W. 1 mm. Body with 12, irregular,  
(1.3 divided by a vertical as distinct as the others)  
irregular points, ciliated, separated by black,  
slightly folded at vertices. Head rounded,  
the back long slender, dilated at tip  
knowing want (in ♀ of which wanting) the  
2 or more small. S. d. lat. 3-5, 8 o. v.  
each 2 red, pale gray, the last somewhat  
yellowish with darker fuscous by white  
hair & many short bristles from the margins  
obtuse pointed tips. Mouth in! body covered with  
numerous points. The body has appear minute  
nearly always at the tip, while the short  
ones are of different sizes and stand at the end,  
just like a jagged or chaffed tip like a scale  
on a crop.

the original Fernández, Gómez, Gómez,  
Gómez, etc., as they are all the same

present a double carinate ridge kept  
with bones near the middle. When  
it is a certain point, by a few grad.  
convex towards each other & then turns  
a small flattened space on their sides.  
A very smooth lower surface on the rest  
ab. sq. flattened laterally & furnished with  
5 points like saw teeth. (it is very high)  
The middle one which is larger & sinist.,  
color of bluish green, the process being  
1.8.5 mm. in the 2 mm, abd. carina 1.5 mm.  
long. See 26 1893. Cat. No. 9057

### *Bryopterus peracelidactylus*

Refined form from the last  
stage. Body is elongated & rounded slightly  
at the base, about black to dark brown  
the entire body and the mouth which  
was formed in a cellular way. Dorsal & ventral  
a little; the ventral part black & the dorsal  
brownish yellow. The upper surface  
is brown, and the middle w. 2.8  
long, and ventral w. 1.2  
width. feet yellowish white, having in a  
circular & linear blue marks on  
the feet, the hairs, when it is  
introduced, the

"black & white" like those  
of the top plate. They are in more or  
less dotted with small yellow dots  
and the 11-12 transverse rows of  
spines black 384

of *Bryopterus peracelidactylus* from  
S. Africa, Ab. 1.90 m. L. ab. 96 mm.  
round, somewhat flattened, otherwise  
as described earlier at the beginning.  
Dorsal less than 40 deep, goes down  
very well, a few of them up to 15  
at edges of fins, of course on the  
bottom and formed of very large  
yellowish colored scales which have been replaced  
by white ones. The ventral  
top one and the middle, the first  
one is replaced by three smaller  
scales, but not so well, and also  
slightly more blue & the others, more of the  
bright about 2 mm. Scales  
and head (1.5 mm. long)

*of marlins* = *Gadus williamsi* (which  
& *Clarkeia elegans*) (about)

*Gadus* = " albonotatus  
merluccius" which has 11 dorsal  
yellow areas, 11 ventral, and a blue  
opercular area, and a dorsal and  
an anal fin, and each rays of the second 11-12  
are pale blue, and the third posterior  
ray of the dorsal, the fourth anterior  
ray of the anal, and the first

Calc. .32 .54 .90 1.5 2.5 40.60

Found .3 .5 .8 1.5 2.5

285

Alycia macrolete n. sp. Juv. 1923  
Stage 1.3 mm Ht. labored, shiny pale yellow,  
ocelli black, body smooth, no  
ridges or tubercles, head rounded,  
narrow, not thick as 2/3 its depth,  
small, and used in walking, not  
at rest. Larvae loop, rest in back  
2 pairs of legs, color subcylindrical greenish  
yellow, faint, vague central or collar  
ring, most distinct in 5-7 segments  
the blackish spots on back, first  
black and blackish, not thick, few.  
Stage 1.5 mm Ht. shiny blackish, body  
of seg. 1.3, no large, shiny pale brown  
ocelli near, a few very pale blackish  
5, 6 & 11 & elevated in 2 bands in the  
posterior part. Rest normal, all smooth,  
tubercles low down on sides. Tubercles  
① 6 ② in 5-7 & ③ on 12 are large thin  
the others small, black, otherwise  
rest same before has a little more  
darker vague band and the body  
is more whitish, after maturing  
it more whitish, after maturing

Stage 1.8 mm Ht. as before. Body smooth  
whites & honey yellow, becoming  
grey around the bases of the larger  
tubercles. Ocellus a fine shiny black.  
5, 6, 7 & 12 distinctly enlarged downward,  
especially at 2 & head elevated,  
tubercles conical. ① 6 ② in 5-7 and  
③ on 12, recently large and  
projecting, a whitish patch laterally  
above 11-12. Below them, 15, 16, 17, 18  
tubercles normal. ④ on 2 which is a  
black streak with white center.  
Stage 1.5 mm Ht. shiny blackish, skin  
smooth with about 8 rows of  
small tubercles, thin white hair,  
body marked with blackish spots, some  
somewhat rounded, but tending to form  
transverse rows hair, feed (tubercles  
black, the latter round and elongated)  
as before. Hair long, fin white, slight  
color (5-7), 12 & other eggs laterally marked  
with large lateral white spots  
separated by a series of interengaging  
bands anterior 5-8. (See 01. 272)

but distinct  
part of outer edge  
Mar 31 1901

386

Refined back in the costal band, yellow. At base, broad median lobe, slender, lobes full but scarcely equal, and very densely covered with large granulations. Black, not shiny, with several pits, round, scattered near mouth. W. 2 mm. L 2 very small, body pale black. Vomers 1/3 again smaller. A narrow costal band, spiracles about middle, with a usual ostium; the first well pointed, 3rd pair small, pointed with fine ad. spines. Three strong shiny black, body black blackish purple, faintly mottled with pale brown lines, the dorsal, shoulder, neck, caudal both dorsally with very minute short pointed off black pale spines. Broad vent, black, and edge of costal band ventrally in 11 & 12 and the large transverse rows will be paler, the posterior divided along mid line into two elliptical areas.

387

<sup>Gaster.</sup> *Nympica cerasera*  
big yellow lobes on scutellum, small, spots  
of ventral band, Vom., July 19, 1893. Hd very slightly  
blistered, lobes full laterally, clypeus large,  
gape not deep, color light yellow with a  
round black spot outward from each lobe,  
a spot over ocelli & some smaller brownish  
ones on clypeus. Labrum white. W 2.4 mm.  
The first close together, add on 12 & 13 just only  
black, light yellow, about 12 annulations but  
somewhat irregular with very narrow deep  
from long time. 3d, dist; last, supra-stig,  
& 3d point (the 2 latter connected before)  
below each spiracle by a concolor black  
patch between them a white spot around  
the black spiracle); 8th, just below supra-stig,  
caudal; 12 ventral (and less) quite distinct  
abdomen with brown black spots like  
those on head. The gape less distinct,  
anterior, with brown, (yellow in one)  
that made more coarse open and with a  
yellow tint of a leaf. Hd 17 mm.  
Jany 20 1901, 1893. Zebra caterpillar  
cat no 9532 a pale tan sub-acute  
black

Calc.	1.23	1.98	3.2	5.16	water & c.
Found	1.2	2/0	3.2	5.	

388

*Apatela bilineata*, clav var.  
A pale like fig. in outline but ate bayberry  
Pale, like our eastern species & without red.  
This tinge becoming paler. Mouth full,  
stage 1d <sup>(third)</sup> July 20, 1934 volv. with  
mt brown & streaked with black in  
an inner band from ocular upward and  
on each edge of the clypeus. Mouth parts  
black, black and under side of head.  
6 fine pale hairs. 12 large, slightly bld.,  
rather fine in front, oblique. Overlaid  
by long white hair sp. - 236 part, coarsely  
bld, cylindrical, tapering gently posteriorly.  
12 enlarged d. slg. ft. but. D as large  
as any others, only a little ant. ② ad. ① old.  
Dannite, first step. ③ 5-V, ④ 5-V post, middle  
6/2-4. Old ant, ⑤ to the right of. On 12 ①  
I see none in hair & ⑥ is larger. ⑦ 13, 4 want D  
all the edges of ant ⑦ are now one sl  
on 13 prs. 3rd, strikingly mottled with  
white & black, the black predominating  
& base by anterior, centrally on  
the legs & edges of the narrow base  
yellow d. ⑧ 1. A few ad 15-3

in 1st antennal base  
11 " " white tufts dark & white  
base, the former broken (obs. ant) &  
yellowish white, pointed in the middle  
dark pale, with fleshy trachea tan pale,  
long & spreading than, with a few black  
ones at extremities & certain tufts  
of hair hidden. There are a few very short  
fine hairs from ③ ④ a.s & small tufts  
of longer brown tuft from ② ③ a.s and  
small white tufts from ④. 3 equal  
affixed with tuft from ① ② a.s, the  
tip of them looking from like around head  
A few hairs from ① on 10. A black somewhat  
finches penit from ① ② a.s (each 2  
caterpillars) and white tuft ③ ④ 12.  
with yellow striped. 4 ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩  
7-10 the black hair at angles of clypeus & pale  
before eyes. The few. 11-12 5 mm. long & wide  
3 mm. and the same yellow & tan as above  
over & which form a patch. Want all very fine  
sparsely white, short tufts. Some very small hair  
③, long hair and a few lateral hair backs. Tufts  
short which form chain (hand to hole length) & tied  
with the 1st 2 bristles. 13 ft all fine light pinkish  
brown or very leather color, ② ③ a.s & the long ④ ⑤ ⑥ ⑦  
a little darker in shape. Small tufts on 14 7-10  
Same 1st two signs back 15 mm. White after pale  
hair 16-17 18-19 20-21 22-23 24-25 26-27 28-29  
20-21 22-23 24-25 26-27 28-29 30-31 32-33 34-35  
36-37 38-39 40-41 42-43 44-45 46-47 48-49 50-51  
52-53 54-55 56-57 58-59 59-60 61-62 63-64 65-66  
67-68 69-70 71-72 73-74 75-76 77-78 79-80 81-82  
83-84 85-86 87-88 89-90 91-92 93-94 95-96 97-98  
99-100 101-102 103-104 105-106 107-108 109-110  
111-112 113-114 115-116 117-118 119-120 121-122  
123-124 125-126 127-128 129-130 131-132 133-134  
135-136 137-138 139-140 141-142 143-144 145-146  
147-148 149-150 151-152 153-154 155-156 157-158  
159-160 161-162 163-164 165-166 167-168 169-170  
171-172 173-174 175-176 177-178 179-180 181-182  
183-184 185-186 187-188 189-190 191-192 193-194  
195-196 197-198 199-200 201-202 203-204 205-206  
207-208 209-210 211-212 213-214 215-216 217-218  
219-220 221-222 223-224 225-226 227-228 229-230  
231-232 233-234 235-236 237-238 239-240 241-242  
243-244 245-246 247-248 249-250 251-252 253-254  
255-256 257-258 259-260 261-262 263-264 265-266  
267-268 269-270 271-272 273-274 275-276 277-278  
279-280 281-282 283-284 285-286 287-288 289-290  
291-292 293-294 295-296 297-298 299-300 301-302  
303-304 305-306 307-308 309-310 311-312 313-314  
315-316 317-318 319-320 321-322 323-324 325-326  
327-328 329-330 331-332 333-334 335-336 337-338  
339-340 341-342 343-344 345-346 347-348 349-350  
351-352 353-354 355-356 357-358 359-360 361-362  
363-364 365-366 367-368 369-370 371-372 373-374  
375-376 377-378 379-380 381-382 383-384 385-386  
387-388 389-390 391-392 393-394 395-396 397-398  
399-400 401-402 403-404 405-406 407-408 409-410  
411-412 413-414 415-416 417-418 419-420 421-422  
423-424 425-426 427-428 429-430 431-432 433-434  
435-436 437-438 439-440 441-442 443-444 445-446  
447-448 449-450 451-452 453-454 455-456 457-458  
459-460 461-462 463-464 465-466 467-468 469-470  
471-472 473-474 475-476 477-478 479-480 481-482  
483-484 485-486 487-488 489-490 491-492 493-494  
495-496 497-498 499-500 501-502 503-504 505-506  
507-508 509-510 511-512 513-514 515-516 517-518  
519-520 521-522 523-524 525-526 527-528 529-530  
531-532 533-534 535-536 537-538 539-540 541-542  
543-544 545-546 547-548 549-550 551-552 553-554  
555-556 557-558 559-560 561-562 563-564 565-566  
567-568 569-570 571-572 573-574 575-576 577-578  
579-580 581-582 583-584 585-586 587-588 589-590  
591-592 593-594 595-596 597-598 599-600 601-602  
603-604 605-606 607-608 609-610 611-612 613-614  
615-616 617-618 619-620 621-622 623-624 625-626  
627-628 629-630 631-632 633-634 635-636 637-638  
639-640 641-642 643-644 645-646 647-648 649-650  
651-652 653-654 655-656 657-658 659-660 661-662  
663-664 665-666 667-668 669-670 671-672 673-674  
675-676 677-678 679-680 681-682 683-684 685-686  
687-688 689-690 691-692 693-694 695-696 697-698  
699-700 701-702 703-704 705-706 707-708 709-710  
711-712 713-714 715-716 717-718 719-720 721-722  
723-724 725-726 727-728 729-729 730-731 732-733  
734-735 736-737 738-739 739-740 741-742 743-744  
745-746 747-748 749-750 751-752 753-754 755-756  
757-758 759-760 761-762 763-764 765-766 767-768  
769-770 771-772 773-774 775-776 777-778 779-779  
780-781 782-783 784-785 786-787 787-788 789-789  
790-791 792-793 793-794 795-796 797-798 799-799  
800-801 802-803 803-804 805-806 807-808 809-809  
810-811 812-813 813-814 815-816 817-818 819-819  
820-821 822-823 823-824 825-826 827-828 829-829  
830-831 832-833 833-834 835-836 837-838 839-839  
840-841 842-843 843-844 845-846 847-848 849-849  
850-851 852-853 853-854 855-856 857-858 859-859  
860-861 862-863 863-864 865-866 867-868 869-869  
870-871 872-873 873-874 875-876 877-878 879-879  
880-881 882-883 883-884 885-886 887-888 889-889  
890-891 892-893 893-894 895-896 897-898 899-899  
900-901 902-903 903-904 905-906 907-908 909-909  
910-911 912-913 913-914 915-916 917-918 919-919  
920-921 922-923 923-924 925-926 927-928 929-929  
930-931 932-933 933-934 935-936 937-938 939-939  
940-941 942-943 943-944 945-946 947-948 949-949  
950-951 952-953 953-954 955-956 957-958 959-959  
960-961 962-963 963-964 965-966 967-968 969-969  
970-971 972-973 973-974 975-976 977-978 979-979  
980-981 982-983 983-984 985-986 987-988 989-989  
990-991 992-993 993-994 995-996 997-998 999-999

These May 1884 Cal. No. 10863 Apatela bilineata

389

ochre on stem

purple Apotela on beach plum Annona maritima

[Previously found on apple at Linnard Hill?]

to top, slope of beehived, media antea  
deep before water but shallow behind,  
feet upright. Blackish mahogany.

String darker below. Dappled black  
with central spot purple pale  
marks from a  $\frac{1}{2}$  sheaf white seed  
under cypress. Side just matched  
with pale. Brownish ant pale. A few  
reddish hairs. W. 3.5 mm.

Body green with, 12 enlarged d. in  
a point-granular elevation in which  
bears ①② at the corners & pointed out of  
nests slight, consisting of scarcely more  
than an aggregate of 3-10 yellowish  
fibres with a slight enlarged

conspicuous base. ① as large as any,

② rather broad, just to 5  $\frac{1}{2}$  spines.

On 2, ③④ are scattered over the large d. & b.  
not distinctly aggregated with nests.

① about 2-4, ⑤ stig. On 3, 4 at times  
close up to the apex of one part.

Hair very thin, long, quite thick, tapering  
upward, with a few short pale ones  
set upon body. Body lilac, shading  
into blackish lat. 6-8. C-sh, feet  
13 post blackish, a few d. hair  
grayish or dried brick red spots  
from 5-11 (red dash on 3-4) in a  
sub-elliptical velvety black patch  
which surrounds <sup>the</sup> ① & ②. D. black  
at base, ② on a yellowish white portion,  
a diffuse line with blood d. shade connects  
other marks & covers dorsal part, 12 d. &  
is unanmented. 13 purple. with its root  
as well as the other 1. ③④ change color  
a lateral blue line just above ③. Below  
③ the blackish 3-4 shades begin which  
black with white center

Imago Apr. 27, 1898, cat. no. 10854

Accomplished

390

Notes on a small black oak tree N.W.  
Mass., July 23, 1913. Egg very spherical,  
somewhat cup-shaped, the lid like top  
slightly distinct by its contact; color  
was a central depressed black nipple  
color white, the sides somewhat grayish  
in contrast with the very white lid  
beam .9 mm, width lid .6 mm. Height .65 mm  
Under side of ac. smooth or faintly reticulated  
like hen's egg, microscopically white or black,  
faintly reticulated. Under side of lid divided into  
small rounded hexagonal areas by  
low reticulations. Maculae in slight  
depressions, elevated, a regular gray. On  
the reticulations, are less distinct at the  
sides, becoming obscure proximally. The  
bottom of the egg was flattened and could  
not adhere to the leaf by a solid substance  
Stage I he round, smooth, not bilobed. The  
stems not evident. Mouth and a little  
projecting; entire shiny black w. .50 mm  
a few short glossy white setae and a few  
white colored tubercles. Mouth and shield

black. Posterior, a little wider anteriorly than at the corners, slightly rounded, bearing 3 glossy tapering hairs from minute tubercles  
at each ant. corner, 1 at post corner and  
1 each side middle line behind the center.  
On a 3d black spot bear 5 setae from  
colored tubercles with black spines. A  
small black spot just below the spine  
A large spot below with 4 setae and another  
above base of foot with 3 shorter setae.  
The feet shiny black with dark hairs. Spin-  
ules black. On 3-4 ② as in all a black spot  
surrounding the tube a head like which has  
setae, 3 in number. ③ with 2 setae. ④ 1 seta  
⑤ ant. 2 setae, ⑥ center 2 setae. On 5-12 ① with  
a little above 3d, large, 2 setae. ② pal, 5d  
smaller, 1 seta. ③ lat. 1 seta. ④ 8-8 post, 13 seta  
⑤ & a little below and to IV, 1 seta. ⑥  
above, base of leg clear. ⑦ on 5-6 <sup>11-13 seta</sup> in line 9 legs  
black and well connected by black, scattered,  
⑧ single minute dot each side median ventral  
line, center plate, Abd feet 7-10 black  
with several setae. Plantae pale cast with  
black. On 13 2 next dorsal spots a line

each with 1 seta, between them a toothed  
dorsal incisure, another to 1/2 from the anal  
plate, and seta in front of the incisure.  
A lateral one behind it, & 5 or one in front  
which is now (?) already mentioned. Row  
of 8 before anterior, Anal feet rather long, truncated  
and no evident crochets, black, with  
8 or 10 long black setae. Several plates  
hemispherical, black, indented on the  
margin and edge centrally with a  
row of 6 marginated setae post. and on  
each side the indentations ant. Color  
light yellowish with a d. & lat reddish  
brown coffee bands, not meeting at  
extremities, with faint trace of annules  
3-d. stage and 3-8 bands. Skin smooth  
and shiny with no hair except those  
from the spots. Bases of abd. feet minutely  
covered with black granules on the <sup>post 10</sup> 11  
The granules become absent and to 5, but  
are present 5-8 on legs segmentally.  
Length about 4 mm. Sit on pink or red  
it gregarious & elevate with extreme  
when disturbed. Take the red brown

become very distinct on base of the feet,  
3, 4, 12 & sometimes centrally a black, giving the  
appearance of patches on transverse bands.  
July 28 Head higher than wide, slightly  
narrowly rounded, not bilobed, the surface  
smooth, impressed; depressions in which on each  
a shiny black, minute, sharp and a few  
setae from very small tubercles, one from  
the vertex of each lobe rather longer than the  
others - called 5 in a semicircle, from the centre  
of which arises a seta. Umbilical black, with  
a pale median enlargement. The setae are  
minutely barbed or cleft throughout their length  
with 9 rows. Abd. feet shiny black, body reddish  
brown with whitish, 3rd, lat, stg., or  
(interspersed by narrow, less) a medio-l. yellowish  
line, becoming confluent posteriorly. On rows of  
rectangular, surrounded by its filaments  
tubercles, black. Anal plate, hemispherical  
with a central median tubercle, black.  
Anal feet black, long, propodus black and  
bearing several stiff, black setae. Other  
setae on the body, all pale, those of the  
last stage supplemented by a large  
one.

number of rather fine and short  
(but about as long) ones going from  
minute black tubercles all over the  
body. Outer plates of abd. feet black.  
The 4 primary hair from the outer edge  
of the abd. are much longer than any  
other. III (right) & IV (left) same, width  
1.55 mm. Secondary hair rather less than  $\frac{1}{2}$   
as long as primary, all pale. Hd. the first,  
abd. feet, small plate & anal feet shiny  
black now, dark reddish brown with  
four narrow yellow stripes on each side  
separated by the lower 5-6, & 3 ventral  
stripes, the outer on each side broken by 6  
legs. Minute tubercles which turn rusty black  
most by 1/3 & do 2.5 regular minute  
stripes but continued pale except at  
the base of the 4 lateral. Hair all  
white, the 2<sup>nd</sup> about  $\frac{1}{2}$  as long as 1<sup>st</sup>,  
but slender. Legs from 2-3 times  
wider longer than any other.

IV (right) & III (left), on the  
largely black, remainder white, the 2<sup>nd</sup>  
short, but very well developed, the

inner one. Hair as on first  
but with very few, if any, on the  
inner side of the lateral pickets.  
The upper body has a  
few short jet yellow hair bases  
on the upper part of the abdominal  
plate, all others on the sides of the  
abdominal plates. The legs  
are black now, the upper part of the  
inner side of the 2<sup>nd</sup> & 3<sup>rd</sup> abdominal plate  
yellow. The 4<sup>th</sup> is unaffected. But the  
inner side of the back of 12. Head black

390 A

The last (5-6) are very early 2-6. Anal  
plate  $\Delta$  3 setae or first margin on  
each side & one each side mid line  
on anal margin - V-shaped. All other  
from 5-6 to tubercle.

With legs 16 <sup>(sample)</sup> Dorsal tubercles as coll.  
& little anal plate. Body red, brown,  
streaks dark brown. 2<sup>nd</sup> has about 10,  
about 2<sup>nd</sup> now as 10, long ones in coll.  
Line across the spaces, bases of 2<sup>nd</sup>  
pair, red, rest white or with lines.

With legs 16 Body yellowish brown, no  
moderate lines, has all short, & about  
as many as 10, & a plate of red flesh.  
Anal line present, brown & red yellow  
brown. Looks like minuta

With legs 31 Same, line sulphur-yellow, not  
concentric. S-sh yellow or partly so in some  
can't be organic, but = minuta = 390

[390c]

narrow. Hair thick, very long, almost trifid, red, pale & few black, the base of abd. concolor.

390c

On 12 Aug. at 9<sup>th</sup> Mtn. Cr. 10,000 ft., 1915  
I found a ♀ Sciaroides a few feet S.  
in place it was born with a large  
white narrow tan spot (or a band)  
near hind pale yellow, with a  
few white & few black, others  
black with a band, each pair  
born from 4th to 7th seg. and  
each pair had a white  
white hair place. Hind legs  
black & white, white hair  
and white, hair white with black  
Mottled like marl, yellowish white  
hair white, oblique, 22  $\frac{2}{3}$  wld. wld.  
on abd. a long, all long, curved  
hair much. Hair on. Wings green faded  
blown body bluish brown. Head & hair  
yellow & black.

W<sup>th</sup> 18 Aug 31 a marked change. Suddenly  
very hairy, nose as thin contracted, red  
purple hair, hair white, the hair  
wings very narrow, lower on back,  
feet hair absent, mouth ventral

370B

Egg on white base ~~base~~ of a sub.  
flat-topped base, smooth, top down sloping  
as higher on one side of another, the  
whole microscope scarcely impinged white  
lid as wide as egg, reaching half way  
down the side in lateral view. diam. 7 H. 7  
Lower half grayish, top pure white.

Larva to stage II must be contrasted  
with next pl. the anal part of abd  
exteriorly black. Body yellowish with  
dark black brown bands, sides & front  
frontal reddish grey. Hair white. The  
2 hair about as long as P, nose white  
blow hole pale. Head & abv. lvs. (abv. lvs.)

III to the 1st hair as long as P, all white, the  
anterior band very long, both P & 2<sup>nd</sup> body  
holes black, pale, yellow, very short, not long  
with black hair, no bands, also a  
bullet point median long white, all others  
black. Submentum in the median  
distances of the 2<sup>nd</sup> & 3<sup>rd</sup> abdominal  
lateral line and on the 1<sup>st</sup> & 2<sup>nd</sup> S. 175-180  
not long yellow ochreous, very long & red  
tail at 2.8 nose suddenly very hairy

391

391

Same  
egg on base of yellow leaf 17  
x 11, 6-27-98 possibly from a tree  
in p.p. - Now set up in  
maggie, stiff, shiny. 65 mm  
length over all, banded and  
intercalate, with irregular  
a considerable area  
of white on the sides  
of each segment,  
a great deal quickly abraded  
or lost opaque white.

Anal part of abd. contrasted  
with next pl. I have not  
seen a pupa = number  
of stages

Young larva very young  
a number of points to top of the yellowish  
white V-mark in which 2 white  
on 11 almost meeting the 4 stages longitudinal  
A double dorsal spine 12-13, 14-15  
16-17. Setae rather long brown, several ♀  
subterminal part, lvs. abt 5-7 mm. 15

4 eggs on back of willow leaf  
K.V. 6-27-98 possibly ex worn  
very pale yellow with a dark  
ring, slightly shiny. 85 mm  
width measure bagous  
reticulate, with irregular  
a considerable area  
around the main p. b.  
apparently solidly ground  
and of age as if  
encrusted, but may not  
sufficient  
satisfied July 2 Like the one  
wall gift = uncoarsened

S. tricolor?

Egg more than hemispherical flat at base. Blain. 8 mm. - 60 diam after scarcely noticeable, rather faint, extremely crossed but broad center sparsely with streaks numerous short pale lines radiating very sparingly with enlarged sparsely lobed tip.

In var Apicalis, tubercles large

① with enlarged bases 5 & 12  
saw like densely crowded teeth  
apart HD slightly rounded,  
rounded, light brown, with a  
few pale stripes. with A in  
middle rosette with pale veins  
in a pale ground. On 4, 6, 7 &  
8 a bright yellow spot around  
the dots with a thin cap.  
except 5 & 12 on 11 extremely  
oblique forward a body forming

Molting on the V. Tidels  
dark, quite so on O'sullivan  
Thos. just hatched, white.  
blackish brownish (except anal)  
Setae long slender, pale,  
slightly swollen at base  
granular, often with  
a drop of yellow liquid  
molt at 45

(back to tail)

Eg (265 diam) Beautifully  
reticulated, the irregularly  
hexagonal cells radiating  
out from the amorphous  
concentric rings. (9 cells in  
first circle) like strings  
on a dome, the pile like  
structure arising from the

angle of the reticulation  
as slender rods of about  
equal thickness throughout,  
not appearing swollen at tip.  
becoming more regular  
as one goes down the side  
57A

Same egg and larva as  
white brick Keene Valley  
N.Y. June 1, 1894. Setae  
as follows, granular with  
dash of fluid at end a middle  
one central on a little part of  
it (3) wavy, the spines  
are all black, black granular  
blotched outside, D 58 feet,  
D below and, (6) and base of  
by clear) 5 setae on black  
lid plate. On legs seg  
D: 3 tubercles in  $\Delta$ , 8 in one

Obs. especially absent  
in the higher reg. [5 & 6]

Often in stage I as above  
with June) red on brown lobes  
a tubercle at water level  
but dark in air or lichen, a dark  
liffette at side of 1-4 mm. i marked  
with yellowish all whizou to  
II where a yellow orange dash;  
5th represent v-mark. This  
not colored and all brown  
j with annual bases, and II  
obscure so; bright purple on  
buds & setae glomerata; present  
suffused! Like most but pale  
in 3-4 months brown; body dark  
brown, the first winter of old  
v-mark on II very distinct. Late  
in the vides become light green  
and there is a yellow mark at  
sprouts in II

~~Another has a tiny tubercle  
and seta dashed in (iv) on  
giant 4, not visible base in 3~~

more yet to  
be seen



Eggs white with yellowish speckles.  
Posterior base smooth, top down. Lateral  
veins less in number & more dense, the  
posterior microfibrils scarcely exposed. White  
lid as wide as egg, reaching half way  
down the side in lateral view. Diam. 7 H. 7  
Lateral body grayish, top pure white.

Lapillus in stage II must be contracted &  
wide, except the canal for 1st abd  
extreme of back. Body yellowish with  
a short black band, sd s 9-9  
white reddish grey. Hair white. The  
stomach about as long as P. You will be  
able to see it. Heels about 1 mm. (sl. l. l.)

III <sup>(empty)</sup> This is as long as I, all white, the  
body yellowish with black body  
band black, yellow, orange, red. H. 6.5  
sd 11.5. Black very narrow, also  
black on nose as long as black on body  
but black below on the sides  
distinction between black & yellow  
lateral line not so great as in I (sl. l. l.)  
with long yellow color very bright  
at all times.

Schizopore united in one cluster, 10 mm. etc  
widest at just 9. Top of latter wide & even  
narrowed above, lobe pointed, dark reddish  
brown, orange, mottled with a very faint  
blackish band given out, to apex of lobe  
before the lateral angle angles. man.  
Not so high as head, 3-4 higher, a low  
body, born on 5 with punctate apex. Tuberc.  
3 slightly elevated very high, and a row  
from 11 or 12. Anal on 11 with 10  
but not used, and 11-13 being elongated  
color reddish orange below, & deep  
brown ab. band 2-4, narrow, not to  
the hump & reflexed, and on 1, the lateral  
elongated patches in 3-4. The feet not  
a darker brown lateral line & narrow  
slightly sd lines on 5-10, filled in part  
with pinkish 5-8, with a deep brown  
stroke on 9 pointing to apex of the yellowish  
black V-shape on 9, which continued  
on 11 almost meeting the lateral line there  
A brown dorsal shade 12-13, practically  
11-12. Setae color long brown, no such ④  
subepiphallal part, if not 5-11-10

Calc. 51-68 .93-1.2 1.7-2.25 3.0-4.0 5.6-7.4

Found .9-1.2 1.7-2.25

.392 (= 31)

*Aristotelia* white vale, Marshall, was 3.45, ♀  
tear-shaped, deeper than wide, and lobed,  
dyspermatous, the upper part above &  
the anodion impressed; shiny brown-  
black, with a yellow center. 4.12 mm. (10)  
Body apparently cylindrical, dor. s-v ridge  
quite prominent on 12. flag black  
G.V.; anal plate elongated with body  
intercurrent. On a pair of long 5-d  
tars, black spine with 2 long &  
close to tip 2.6 mm. Same & short small  
black tubercles @ ad @ ad D<sub>3</sub> & 4-12,  
scarcely distinct. Hair and tuft on  
s-d cloth and one each side anal plate  
very dark brown; flag & 1 ad  
anteriorly (each) small black <sup>posteriorly</sup> ~~posteriorly~~  
Molt at 30 ad same, abu. - dark reddish  
red, hair & other brownish. 3.17 mm.  
Body greenish brown with red dots which  
are lost  
Underparts white, white streaks along  
dorsal & ventral body and glabella  
marked, spine brownish, 4 mm. long.

卷之三

On back smooth grey, very white  
at center & a small black patch  
near center of body. Caudal fin  
greyish with several plates & anal fin  
purple like several plates. Spinelets pale  
greyish, 6 rows of them. Shape not very black.  
Row on 3 smooth with 2 apical setae half  
as long as the 3 black. Length 16 mm long.  
Spines have varying sizes, each short, smooth,  
curved black with a seta longer than  
the former. All spines brown black &  
black on the scales. After 1.0, 1.1-2.3  
Stage 3.5 1.0-2.3, shiny brown after  
1.0-2.3 mostly small, 3 long 4-12 sharp  
points curved, 13 arranged, 2 apices  
small on first edge while points. ② lat.  
2-13, like 3 but shorter, a small one on  
anterior plate. ③ m 0-8 fold 2-12, ④ 5-7  
2-6, 11, 13 and. Hair on m 0-8 and a  
full statocysts obscuring all m. Body tan by  
even with smooth wet white granular  
areas. Black (appearing gray), a dull  
brownish <sup>mat</sup> and 6-8 stripes. The first

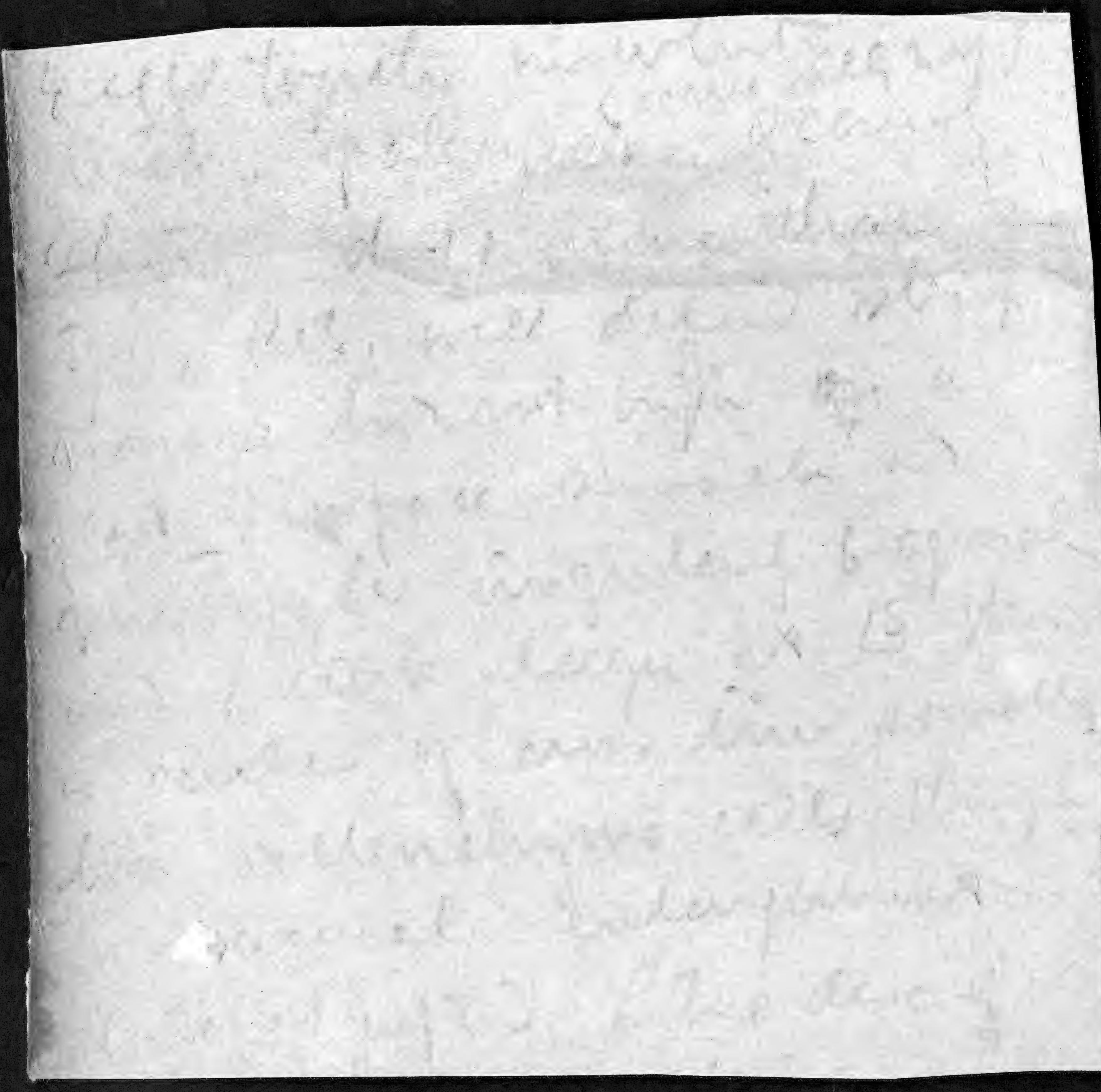
3 small yellowish pub down, all year  
Ventral feathers Sooty black  
3-5 hrs 12 appearance gray and light brown

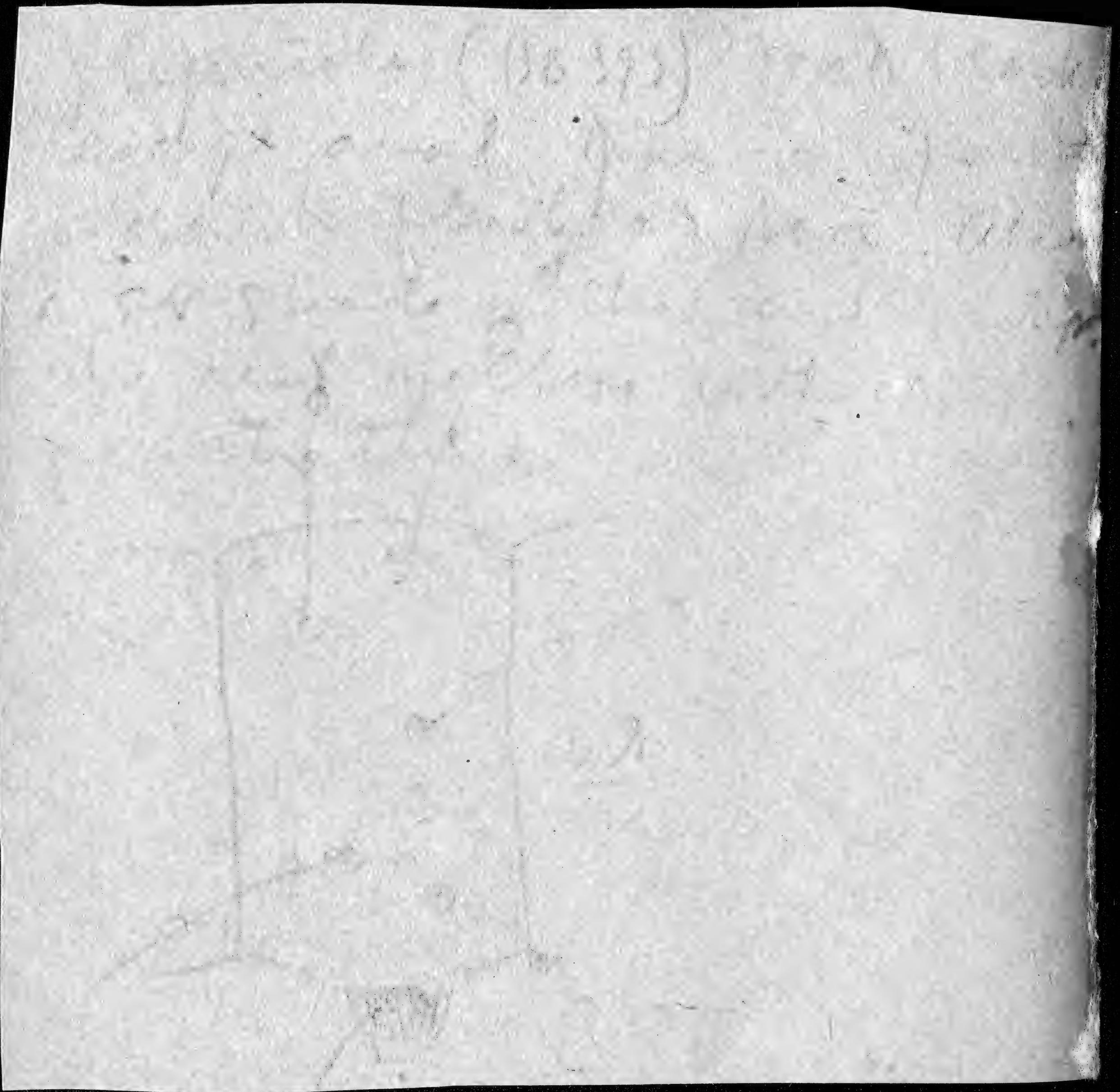
3

Sept. 15, 1900. Departure on blockade boat,  
arrived at San Juan on morning of the 16th.

*leptostoma* (Berg) Jacobson  
Jacobsen and Bain in Jacobsen  
and Bain, *Bot. Mag.*, 1900, p.  
179. Type locality, "in the  
forest belt of the Andes, in  
the valley of the Río Pichincha,  
between Quito and Cuenca."

must be drawn  
entirely off with  
 $\approx .65$  mm ( $50\mu$ )  
by this time.  
Remember that  
the  $\mu$  is  $10^{-6}$   
mm, so  $.65 \times 10^{-6}$   
=  $6.5 \times 10^{-7}$  mm.  
(That's  $6.5$  microns)





16

17

18

3 small plates pale brown, also few  
black rhomboid spots which large black.  
Total length 12 appearance gray, and light brown.

393

Eggs longer slender on blackish back,  
2-1/2 in a lateral row on underside. Under body very  
thin - semi-transparent flesh below. Smooth  
skin of skin white green. Dorsal fin  
large & round. Under gills white (60 mm.)  
joined with small slightly raised irregular  
protuberance which become gradually  
smaller toward the middle. Below  
there may minute & flattened flaps which  
is most developed. The 2 v. are about elongated  
on the side but become round below and  
greenish on under side where they receive  
an annulated ring like going to form a small  
area of small elongated nubs. In center of  
which is and always at center of each

longitudinal main  
irregularities of which  
are present = .05 mm (.002 in)  
length = .42 mm. width .18 mm  
Under side dark blackish yellowish  
dorsal fins white yellowish blackish  
lateral rows white yellowish blackish  
under gills white yellowish blackish  
Under side dark blackish yellowish  
lateral rows white yellowish blackish  
under gills white yellowish blackish  
Under side dark blackish yellowish  
lateral rows white yellowish blackish  
under gills white yellowish blackish

A run of Beaufort just off the coast of S. Carolina 8/3/93  
 Head oval, high on the side, flattened in front,  
 smooth, green, a purple band on a white  
 ground preceded by a narrow black line  
 from above base & joins to vertex, goes back  
 on other side; a short similar band  
 on first lat & green at ventral side; ocelli  
 black, jaws black, antennae yellowish 11.3 mm  
 long, smooth, thin mouth black around  
 setae from whitish spot; anal feet  
 slender, slightly used; body slightly smooth  
 at exterior, upper surface colored centrally  
 from the position of eyes of head, 1 broad  
 white s-d line has been on 2 & 11 broad  
 area yellow to green, lat. area less of  
 green, brown dotted, specimen older &  
 head edge of a narrow yellow line  
 containing ten purple brown spots. +  
 narrow white d. line edged with black  
 linear line to 4. On 5 it divides into 3,  
 coming together again on 8, going on  
 elliptical areas; on 9 it again divides  
 the way a branch which goes to 10.

base of 11 passes to the break, the central  
 part varying to 13 and. It is yellowish  
 white, scarcely black bordered back to 4.  
 S-d line narrow black bordered above.  
 Besides these normal marks there are  
 the following dark purple brown patches:  
 (1) a narrow oblique line on 5 or 6 from  
 base post (forward) (backward) (2) a  
 s-d junction patch on 7 between d &  
 s-d bands (3) a single dorsal coeliate  
 patch, thin depression out, situated on 8,  
 dividing the d. line and branch reaching  
 the s-d on each side. A few black setae and  
 a blackish line on side of anal foot.  
 In front of the heart shaped spot the junction  
 of the d. line from a white spot, and the  
 branches of the d. line become indistinct and  
 yellow centrally on 7 & ant. on 11 (the last  
 line) and on 12 (tail to emerge) (old)  
 (old)

Another with no yellow on head and neck. June 28 1895  
 H. 24 & P. white line black, the central one not  
 divided. Besides the ocelli described there is a  
 large purple patch above foot on 7 and 11. Sides of the tail  
 smooth above on 4; the d. patch on 8 is contained with  
 a small area, steps up behind the chest (as also  
 the purple patch on 7) filled in with white. Anal  
 line yellow on 12. Circular hairs about central red  
 with black tip. Bands below the black filaments  
 and purple stripes below with yellow

Coll. .62 .95 1.44 2.18 3.3 ratio .66

Found - .9 1.5 2.2 2.9-3.2

395

*Acritia bilineata* on slow mud with sig. 4.

Stage? Hd 2.9 mm Hd as in guttula but w/ only purple stripe on white ground. D yellow-green but blue <sup>purple</sup> ~~yellow~~ <sup>purple</sup> ~~yellow~~ points; brownish spots 3d. black edged above close in 2-4, bent up to ① on 12. Dorsal triple white shade. Setae rather coarse, ① on 4 with enlarged reddish base.

Stage? hd 2.2 mm Same but yello. & white d. shade, but narrow single yellowish line. ① 12 with enlarged base. faint yellow sig. line also in 2-4 toge.

Stage? hd 8 mm Hd slightly bilobed, rounded above, main line deep shiny brownish black, cl. w/ pale, appearance black. Body with anal feet alternating with enlargements at 2 & 12 where the large thick tubercles, ① are; uniform light greenish yellowish 3d line yellowish - anal feet reddish 2 days & 1/2 fm. Hair patches, 2-5, 10-12, incised or almost broken at incisure. Setae rather coarse, blackish, single from normal, concolorous throughout.

red w/ pale. Length about 9 mm

W3 <sup>stage?</sup> Head 1.5 green with black line red veins, 3d band moderate distinct w/ 1st yellow, no other line. Anal feet may, purple spot on back as before.

Calc. 66.99 1.48 2.2 3.3

396

a Schizina on willow Woods Holl, Aug. 4, 1893  
exactly like unicornis but head & body  
light fleshy brown, the markings smooth,  
blackish, not well defined. White  
d. shade on 5-8; V white with a faint  
greenish shade ant. on 9-10. Head  
obscnly finely mottled with greenish  
mark of head about 3.2 mm. No band  
Imags Aug 24 & large ♀ S. unicornis

397 (= 186)

a Schizina on hop hornbeam Woods Holl, Aug 5.  
<sup>(Shd 2.8)</sup>  
Ht 2.8 mm high, slightly lobed, whitish ground  
marked mottled with brown streaks which  
scarce, form any vertical bands. Rather low  
prominence on 5, 9, 12 bearing ① with enlarged  
whitish glandular bases. ① same as 8 without bump  
badly marked like head, oblique white checkered  
streaks 5-8 & lateral line. Dry in 2-4 <sup>velvety brown</sup> darken  
sid 3-4 whitish (not green) slightly red marked  
V distinct, yellow whitish with enclosed dot on 11  
otherwise much as in unicornis. Setal evident  
molt Aug 12 Ht 4.2 same as first Aug 15 velvety, reddish centered  
= leptinoides but more distinct than in unicornis

[See BB217] 398

Schizina spumosa

One single egg on white Oak. Woods Holl, Aug 1  
Egg Hemispherical, flattened below, light yellow  
brane, .85 mm under may 6 o'clock evident set.  
265 diam 9 pyriform pointed cells around the annulus  
entire macrophyte, then in alternately radiating con-  
centric circles for 5 rows of hexagonal elongate cells, then  
for a distance of about 2 mm. the cells are replaced by  
an irregular reticulated vacuolated area forming a band  
across top of egg. Then the cells are continued again somewhat  
irregular pentagonal or hexagonal along the sides  
from center area .18 mm. of vacuolated ring .08 mm. whole egg .80  
of one lateral cell about .03

Lateral pd. slightly lobed, blackish, very

<sup>(Shd 3.5)</sup>  
width .4? Tubercles ① all with distinctly  
carved bases, on 2, 5, 7, 9 & 12 nine distinct  
on 5 forming a high fat cushion a "lobule"  
on 2 tubercle ① rest. Setae very long,  
widely covered with dew drop, pale.  
Yellowish green, shading into reddish  
mottled on the sides, 2, 5, 7, 9 & 12 reddish  
throughout. Feed and tubercles black,  
① on 3, 4, 6, 8 & 11 distinctly surrounded by  
bright yellow. 11-13 elevated; anal fat pole  
Molt Aug 9 Ht. distinctly lobed, arching to  
water the lobes pointed. Ground greenish  
white with a brown-black defined band from  
base of antenna to vertex of each lobe, then  
bands crossed at at 6 by a band just

before bases of claspers & another  $\frac{1}{2}$  way to apex, the latter containing a series of reticulum tubercles. All bands continued to bases of legs. Jaws dark, <sup>slightly</sup> brown. Dorsum scarcely elevated anywhere but on tubercles. ♀ ① have separate elevated snout like bases on 5 & 12 becoming slightly confluent. These long processes ( $\frac{1}{2}$  as long as the black glandular setae) are distinct on 5, 6, 7, 8, 9 & 12, present but less on 10, very slight on 11. On 2-4 & 13 the 3rd tubercles have enlarged conical bases. The feet black, at the next <sup>adipose</sup> colles round as before, yellowish brown red, the latter laterally & dorsally also on 2, 5, 7, 9, 12, forming a dorsal line 2-4 & 11. Lateral sides 3-4 white almost transparent, contrastingly with brown dorsal band. The viviparous part becomes brownish early the yellow most distinct on bases of tubercles & 3-8 on 3, 4, 6, 8, 11 & 13 and a few irregular lateral patches. Molt Aug 3 head 1.5 (excluding 15) Hd greenish white, the 2 broad vertical bands dark red brown with black edges. The trans. bands are somewhat decurrent pointing & connected by a line along midline. Intusse & one upward from ocelli, forming a  $\times$ -shaped mark in front and a  $\wedge$ -shaped one on side. A band on post. edge of head, 3 setae black, distinct with swollen tops. Light process in 5, 9, 12 <sup>dark feathered</sup> with long granular tops. ♀ on 6-8 also very long the other tubercles smaller conical, but all the setae coarse, black with smaller glandular <sup>setiferous</sup> top. 11-13 elevated anal feet slender, long <sup>1</sup>, 13 small markings peculiar & irregular. A watery greenish patch edges with brown on sides 3-4, containing yellow tubercles; a white a. patch on 6 & 7 each with <sup>2 dots on 8, 9, 10, 11</sup> a conical line, & tubercles ♀ yellow. A white V. mark on 10 & 11, broken into 3 patches, the 2 post on 11 yellow, with white dorsal spot

399

Egg in skin - Mus. Hol. Aug 7. Bodkin evident reticulated 265 diam Small irregular pyriform cells around anastomosis. The area has about five rows of concentric cells, slightly depressed, cells gradually growing larger & more regular hexagonal down the side. Forming a ventral reticulum with narrow strands, cells vary from pentagonal to hexagonal. On the ridge surrounding the depressed ventral the meshes are minute vacuolated, but not enough to border them much or to confuse the reticulum. Rather more than hemispherical flattened nose, shiny light yellowish. diam. 8 mm.

Hatched Aug 9 no lobes, sutures distinct; blackish brown, shiny with a few pale setae. W. 5 mm Anal feet up, black. Tubercles black, ♀ all more or less elevated with very pale dewy setae yellowish brown laterally and also on 2, 5, 7 & 12. Feet all black. C. the anal pt. blackish brown. Length at hatching 2.5 mm. (Resembles a Schizaea in coloration & structure, but ♀ is less developed) Hd rather 5.5 mm

Molt Aug 13 Same as BB 398! Hd. 9 mm.

Sides of 12-13 light yellow. Dorsum of 2-5, 8-10 and 12-13 dark red brown lateral region 5-12 with a coarse brown reticulum of red brown on a yellowish yellow ground, the meshes brownish, the spots predominating on 8, & becoming confluent with the lateral portion of the V on 11. This feet brown yellow with red outer rim and reddish. Venter pale. [Schizaea ifromae] next day (Aug 16) had become a regular ifromae the patch on 3-4 became green, the white dorsal one on 5-7, a little on 8 and the V distinct [See BB 217 where the last three stages are described III, IV and V]

400

Sesid larva boring a pit of small twigs of pine with  
a hole from which a lump of gum exudes. Woods Holl.  
Mass. Aug 10, 1893. Staged 1 mm. partly under 2, clipped  
lays all its anterior endent, shiny brown, blackish  
around lower sides abd. per 7/13, 13. Ceph large, over all  
1/3 part of 2, light brown. Tuberc ① ant, ② much post  
③ super stig. ④ sus stig ⑤ post SV, ⑥ ant, ⑦ ⑧ on ventr  
q 5, 6, 11, 13, Band. all reddish brown, tuberc  
small blackish with small dorsal setules.

spinae ringed with black.

Spineless in a hollow under the lump of gum.  
The empty glass case protrudes from a hole in  
the gum. Cylindrical, long, slender, slightly  
swollen at the extremities, case not protracted.  
Last seg. is furnished with two rows of spines  
each, pointing backward. Color black.  
Brown, the abdomen lighter brown. Head  
blackish, has a few spinous denticles projecting  
from the last segment. 9 x 2 mm.

Prob. a mimic well known.

